HANDBOOK FOR

AWARD FEE CONTRACTS

FOREWORD

The purpose of this handbook is to provide information and guidance for developing and administering award-fee contracts. It is intended to be a "living" document, continuously updated to reflect current best practices and policy concerning award fee contracts, and to be responsive to the needs of the FORSCOM acquisition community.

This handbook should not be referenced as an authoritative source in lieu of appropriate regulations. It is not intended to increase, restrict, or deviate from any provision of the Federal Acquisition Regulation (FAR), Defense FAR Supplement (DFARS), Army FAR Supplement (AFARS), or FORSCOM FAR Supplement (FFARS).

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HANDBOOK FOR

AWARD FEE (AF) CONTRACTS

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INTRODUCTION

Government acquisition professionals have a variety of contract types at their disposal, as well as great flexibility to be creative and innovative in selecting the best contracting method for meeting the customer's requirements.

The objective of selecting a contract type is to reasonably allocate performance risk between the contractor and Government while incentivizing the contractor to perform efficiently and economically. The contract type should place the level of responsibility on the contractor to perform that is commensurate with the technical and cost uncertainties of the requirement. Selecting the proper contract type requires an objective assessment of the conditions involved in the acquisition, and should not be based on preconceived ideas or customs that may not relate to the particular acquisition.

Contract types range from firm-fixed-price, which places maximum risk on the contractor and minimum risk and administrative burden on the Government, to cost-plus-fixed-fee, which places minimum risk on the contractor and maximum risk on the Government. Contracts with award fees are widely used in the government. The cost-plus-award-fee (CPAF) contract has been used successfully in FORSCOM for contracting base services. A fixed-price-award-fee (FPAF) contract type is also available and, although used less frequently, provides another alternative for crafting the best contractual arrangement for achieving the government's objectives.

This handbook discusses FORSCOM policies, procedures, and practices in utilizing AF contracts in general, and also addresses differences between the CPAF and FPAF contracts.

SECTION 1

AWARD FEE (AF) CONTRACT OVERVIEW

1.0 General. The AF contract is an incentive contract. It is designed to obtain specific acquisition objectives by relating the amount of award fee payable under the contract to the contractor's performance. An AF contract gives the Government the flexibility to judgmentally evaluate the contractor's performance at intervals throughout the life of the contract and, if necessary, make adjustments to reflect changes in Government emphasis or concern. By entering an award-fee arrangement, the Contracting Officer initiates a process that rewards good performance, incentivizes a contractor to improve specific aspects of performance, and records the Government's assessment of the contractor's progress.

1.1. Award Fee Contract Structure. There are two basic types of AF contracts: cost-plus-award-fee (FAR 16.405-2) and fixed-price-plus-award-fee (FAR 16.404).

1.1.1. Cost Plus Award Fee (CPAF) contract. The CPAF contract is a cost-reimbursement type contract with an estimated contract amount and special fee provisions. The fee established in a CPAF contract consists of two parts:

- A fixed amount (called the base fee) which does not vary with performance and which could be zero. The base fee is paid to the contractor for acceptable performance and is not adjusted as the result of ratings determined during the AF process. The base fee is designed to compensate the contractor for factors such as risk assumption, investment, and the nature of the work. The amount of base fee may not exceed three (3) percent of the estimated contract cost (DFARS 226.404-2(c)).

- An award amount (called the award fee pool) awarded for excellence in performance, as measured by the criteria defined and established in the contract. The award fee pool represents an additional amount available to the contractor to earn for performance that demonstrates quality efforts toward accomplishing the tasks and functions cited in the contract.

1.1.2. Fixed-price plus award fee (FPAF) contract. The FPAF contract consists of fixed costs (including normal profit) established at contract award, and an additional, separate award fee amount. The award fee pool may be applied to one, several

or all of the functional performance areas or contract line items. The fixed price is paid for satisfactory performance; the award fee is earned, if any, for performance beyond that required. A base fee is not used in a FPAF contract.

1.1.3. The AF contract also includes a provision specifying that award fee determination will be made unilaterally by the designated AF Determining Official (AFDO), in accordance with an approved evaluation plan. In the past, award fee determinations were considered exempt from the Disputes clause (FAR 52.233-1). However, effective 25 Feb 00, FAR guidance has been changed to eliminate language exempting the award fee decision from the Disputes clause (see FAR 16.405-2). As the result, while the AFDO determination is discretionary, should the contractor file an appeal with a Contract Appeals Board challenging the award fee determination, the Board, pursuant to the Contract Disputes Act (CDA), will only determine whether there was an abuse of discretion, i.e., whether the AFDO discretionary decision was arbitrary or capricious.

1.1.4. The award fee earned by the contractor is determined by the Government based on the contractor's performance. Criteria for contract performance are included in the contract, and the contractor is then judged on how well it performs in relation to those criteria. The contractor can earn any amount of award fee, from all of the award fee pool to none of it. A contractor will not be paid any award fee or base fee for less than satisfactory overall performance.

1.2 USE OF AF CONTRACTS. Since award fee contracts require additional administrative effort, they should only be used when the contract amount, performance period, and expected results warrant that additional management effort. Careful selection of the most appropriate contract type and careful tailoring should prevent a situation in which the award fee administrative burden is out of proportion to the improvements expected in the quality of the contractor's performance and in overall project management.

1.2.1. The CPAF contract is suitable for use when the following conditions are present:

- The work to be performed is such that specific quantitative or objective measurement may not be feasible, or performance requirements are too uncertain to permit costs to be estimated with sufficient accuracy to use any type of fixed-price contract;

- The additional administrative effort and cost required to monitor and evaluate performance are justified by the expected benefits;

- The work is such that encouragement of contractor innovation is likely to result in a tangible payback to the Government;

- Other types of incentive contracts are not suitable to the function.

1.2.1.1. Prerequisites for use of a CPAF contract are a contractor accounting system adequate for determining costs applicable to the contract; and appropriate Government resources for surveillance that will provide reasonable assurance that efficient methods and effective cost controls are used during contract performance.

1.2.1.2. Use of the CPAF contract for acquisition of commercial items is prohibited. (FAR 12.207)

1.2.2. The FPAF contract is suitable when the Government, although wanting to incentivize the contractor to perform at an excellent or outstanding technical level, is unable to define that level in quantitative terms; or when metrics are not available or practical. Prerequisites for use of a FPAF contract:

- The contracting officer's determination that the costs of conducting award-fee evaluations are not expected to exceed the expected benefits; and

- Use of a FPAF contract must be approved by an individual above the level of the contracting officer. (FAR 16.404(b)(4))

1.3. In selecting an award-fee contract and developing the award-fee strategy, several interrelated factors should be considered, such as the dollar value, complexity and criticality of the acquisition; the availability of Government resources to monitor and evaluate performance; and the benefits expected to result from such Government oversight. It must be recognized that the AF contract is basically a mechanism for conveying and dealing with the performance requirements under contract. Once the decision has been made to use an award-fee contract, the evaluation plan and organizational structure must be tailored to meet the needs of that particular acquisition.

1.4. Cost Benefit Analysis.

1.4.1. Before selecting an award fee contract, the contracting officer should perform a cost benefit analysis of the expected benefits versus the added administrative costs. The value added to the program by using an award fee type contract must be greater than the costs to administer it. A typical way of calculating administrative costs is to use grade levels and hours required to monitor, evaluate, brief and implement the award fee process. Major cost drivers are the number of award fee evaluation periods, performance monitors, and Award Fee Evaluation Board (AFEB) members.

1.5.2. For example, assume four three-month evaluation periods; five performance monitors who spend an average of eight hours per week on their duties; six AFEB members who meet once for three hours during the period and spend one additional hour briefing the Award Fee Determining Official (AFDO); a Recorder who spends an average of eight hours per week on award fee duties; and a contracting officer who spends five hours per period. The administrative cost for one evaluation period, assuming a fully burdened labor hour rate of $60, would be as follows:

5 monitors x 8 hrs x 13 wks x $60	=$31,200
6 AFEB members x 4 hrs x $60	=$ 1,440
1 Recorder x 8 hrs x 13 wks x $60	=$ 6,240
1 CO x 5 hrs x $60	=$ 300
Government Administrative Cost (one year)	$39,180

The $39,180 must then be multiplied by the number of evaluation periods to calculate the total administrative cost for the award fee contract, i.e., $39.180 x 4 = $156,720. This amount is for a 12 month period only; the cost for additional contract periods should also be considered. This is a conservative estimate and does not represent all associated administrative costs that may arise (e.g., the AFDO's time). To complete the cost benefit analysis, the contracting officer compares the quantitative administrative burden to the often intangible benefits the Government receives through the award fee arrangement. The benefits might be measured in terms of the result(s) expected from the areas or incentivized performance, e.g., dollars saved by tighter cost control or enhanced technical capability.

SECTION 2

FEES

2.1. Fee Amount. The amount of fee (award fee and base fee, if any) available to be earned under an AF contract is established at the time of contract award. The fee amount should reflect the character and difficulty of the contract effort, and should be sufficient to compensate the contractor for outstanding performance. While fees should not be excessive for the effort contracted for, they must be large enough to adequately motivate contractor performance.

2.1.2. The contractor's actual cost has no bearing on the available fee. Until recently, acquisition regulations limited the percentages allowed for award fees. The upper limit was ten percent, with a base fee limit of three percent, and award fee limit up to the balance of ten percent. There is no longer a limit on award fee amounts. Instead, the objective concerning award fee amount is that it should be sufficient to motivate the contractor for excellence in designated performance areas. However, the amount of available base and award fees is a point for negotiation, and on a very competitive solicitation the fee will rarely approach a combined ten percent level.

2.1.3. The base fee and award fee should stated in fixed dollar amounts (not percentages) in the bid schedule of the contract. The base fee and award fee may be subject to an equitable adjustment if change orders or other contract modifications are issued that significantly impact the contract performance effort. Each change to the contract should stand on its own as to the appropriate amounts for the base fee and the award fee pools.

2.2. Control of the Fee. Once the fee pool is established, the amount of the award fee portion earned by the contractor for performance is a subjective unilateral determination by the government. In the event of a contractor challenge to the award fee determination, the Contract Appeals Boards, pursuant to the CDA, will only look to see if the AFDO discretionary award fee decision was arbitrary or capricious.

2.2.1. The base fee is subject to deductions which reflect the reduced value of the services performed in accordance with the provisions specified in the "Inspection of Services - Cost-Reimbursement" clause. This deduction has to be quantified and

is disputable by the contractor. Deductions from the base fee are separate from/not a part of the AF determining process.

2.2.2. Payment of the base fee is usually made on a monthly basis (but not more often than every two weeks) upon receipt of the contractor's invoice.

2.3. Allocation of Award Fee. The available AF allocated for each evaluation period is the maximum amount that can be earned during that particular evaluation period. The distribution of the award fee pool depends in large part on the acquisition strategy, and individual circumstances of each procurement. The same holds true for additional award fee amounts based on modifications to the contract.

2.3.1. The total may be allocated equally among the evaluation periods if the risks and type of work are similar throughout the various evaluation periods (see Figure 1 below).

2.3.2. If there is greater risk or critical milestones during specific evaluation periods, a larger portion may be distributed to those periods. This permits the Government to place greater influence on those evaluation periods (see Figure 2 below). For example, if a contract has a short initial evaluation period for the contractor to become familiar with the work (e.g., computer services), the initial period of performance may have a smaller allocation while the remaining pool is divided equally among the remaining evaluation periods.

2.3.3. The actual amount of fee awarded cannot exceed the amount available in each of these pools. Once the award fee is determined and paid, unearned fee is "lost" to the contractor. That is, unearned fee is not rolled forward to another fee pool.

2.3.4. Payment of the award fee earned should be made promptly after the fee determination has been made. This helps ensure that the award fee functions as it was designed, as an incentive to motivate the contractor toward continuously excellent performance.

2.4. Bona Fide Need. The maximum negotiated fees (fixed and award) are budgeted as part of the total contract budget and should be obligated under the basic contract. Budgets for award fees must adhere to the "bona fide need rule" (U.S.C. 1502(a)) which provides that appropriated funds are limited for obligation to a definite period, and are available only for payment of expenses properly incurred during the period of

availability. An award-fee requirement is a bona fide need of the same year and appropriation that financed the requirement against which the award fee was earned, and is inseparable from the work with which it is associated. Any re-programming of award fee must be applied to the initial requirement for which it was obligated.

Figure 1 - Equal Allocation of Award Fee. A total available award fee of $300,000 may be allocated equally among the evaluation periods as shown below if the risks and type of work are similar throughout the various evaluation periods, e.g., Refuse and Waste Disposal contract.

EVALUATION PERIODS	1	2	3	4	Total
Allocation (%)	25%	25%	25%	25%	100%
Allocation ($)	$75,000	$75,000	$75,000	$75,000	$300,000

Figure 2 - Unequal Allocation. Unequal allocations of the available award fee ($300,000) can be used to motivate the contractor's performance to correspond to different degrees of emphasis or risk. If the contract has a short initial evaluation period so the contractor becomes familiar with the work (e.g., janitorial services), the initial evaluation period may have a smaller allocation while the remaining available award fee is divided equally among the remaining evaluation periods. Conversely, if the contract effort requires the contractor to become familiar with the work quickly, the initial evaluation period may have a larger allocation. If there is greater risk or a critical milestone(s) during specific evaluation periods, a larger portion of the award-fee pool may be distributed to certain periods. Unequal allocations permit the Government to place greater emphasis on certain award-fee evaluation periods, e.g., services where seasonal or schedule fluctuations are clearly and consistently indicated. The following illustrates an unequal allocation that reflects different degrees of emphasis.

EVALUATION PERIODS	1	2	3	4	Total
Allocation (%)	10%	25%	40%	25%	100%
Allocation ($)	$30,000	$75,000	$120,000	$75,000	$300,000

SECTION 3

ESTABLISHING EVALUATION CRITERIA

3.0. General. The award-fee plan must define the evaluation criteria used to grade each category of performance. The criteria should emphasize the most important aspects of the program that will motivate the contractor in a positive way to perform in an excellent manner. The criteria should be specific to the needs and goals of the requiring office. If award-fee criteria are either too broad, or inapplicable to a given function, it may be difficult for the performance evaluator to provide meaningful comments and evaluations.

3.1. Development of the Evaluation Criteria.

3.1.1. An analysis should be made of the Performance Work Statement (PWS) and attending standards and specifications to determine those aspects of total performance the government considers critical or important.

3.1.2. Performance may be considered in terms of general categories, such as performance of work, technical management, business management and quality control. Each broad category can be examined and divided or separated into more discrete factors.

3.1.3. Fragmentation of the award fee pool over meaningless or confused performance elements will dilute contractor motivation. Complicated performance elements along with extremely specific evaluation factors may lead to unwanted results:

- Overloaded performance evaluation activities

- Excessive concentration on paperwork; and

- Emphasis on something other than what is really important.

3.1.4. Before selecting performance elements for the AFP, each of the following questions should be answered in the affirmative:

- Is the element meaningful and important to overall performance objectives?

- Is the element consistent with other elements in the plan?

- Is the element sending the contractor the right message about contract performance?

- Is it described discretely so that there will be no unnecessary duplication in the evaluation process?

- Will the contractor have effective management control over performance and its results?

- Are there appropriate standards (quantified or subjective) for measuring performance?

3.2. PERFORMANCE EVALUATION FACTORS.

3.2.1. The evaluation factors used in award fee contracting should not be standardized. Rigid standardization tends to generate evaluation plans that are either too broad or include factors inapplicable to a given function. In either case, evaluators are likely to experience difficulties in providing meaningful comments and ratings. As contract work progresses from one evaluation period into the next, the relative importance of specific performance factors may change. However, the award fee approach permits unilateral modification of the detailed evaluation plan to reflect these changes in Government management emphasis.

3.2.2. Cost control should <u>always</u> be evaluated in CPAF contracts. In general, controlling quality, and scheduled delivery will be important in <u>any</u> AF contract. However, the relative importance and measure of performance in each area may vary according to the needs of each acquisition.

3.2.3. Depending upon the procurement situation, performance evaluation factors may include outputs, inputs or a combination of both. Output factors refer to the end results of contract performance, such as the quality of the services rendered and the actual time of their delivery or completion. Input factors refer to intermediate processes, procedures, and/or actions that are key elements influencing successful contract performance. These may include quality assurance and maintenance procedures, subcontracting plans, purchasing department management, and inventory, work assignment and budgetary controls.

3.2.4. While it is sometimes valuable to consider input factors

when evaluating contractor performance, it is the output factors that represent actual performance. For example, in contracts where performance is demonstrated and measurable in each evaluation period, most input factors would be of little or no value in the evaluation process. Accomplishments, such as achieving small and small disadvantaged subcontracting goals, are what is important, as opposed to the efforts expended to achieve the goals.

3.2.5. Some examples of performance elements, evaluation factors and their corresponding descriptive criteria follow. These are only examples and actual elements and factors must be tailored to the specific contract, and may be changed during the life of the contract to focus the contractor's attention on areas where the government desires improvement.

3.2.5.1 PERFORMANCE OF WORK:

- Quality. Assess contractor's compliance with contract specifications and technical and regulatory procedures to determine if the quality established in the contract and regulatory guidelines is being achieved.

- Schedule. Monitor compliance with scheduled requirements and response to unscheduled tasks. Evaluate the contractor's ability to perform effectively under the schedules and time frames established for the services.

- Information Management/ Technical Data Requirements. Assess the completeness, accuracy, relevance, security and timeliness of records, logs and reports required by the technical specifications of the contract.

3.2.5.2 TECHNICAL MANAGEMENT:

- Organization and Personnel Management. Evaluate the effectiveness of the contractor's assignment and utilization of personnel, e.g., control of nonproductive time, use of personnel skills for required tasks, adequacy of supervision, work scheduling, labor relations, technology utilization, and appropriate use of materials and supplies. Assess contractor's planning, organizing and managing all performance elements and activities to achieve and sustain a high level of productivity.

- Problem Resolution and Communication. Assess the effectiveness of the contractor's decisions and recommendations for correcting deficiencies. Assess contractor's ability to

adjust to changed conditions and requirements, and to work effectively with other contractors and government personnel to ensure integrated operation efficiency. Assess the authority, responsibility and initiative displayed by the contract in anticipating and resolving potential or actual problems. Assess the degree to which the contractor relies on the Government for guidance or decisions in areas that are properly the contractor's responsibility. If the government and contractor have entered a partnering agreement under the contract, assess the level of contractor commitment, participation and follow-through with respect to common agendas for improved performance.

3.2.5.3 QUALITY CONTROL

- Quality Control System Implementation. Assess the contractor's overall quality control (QC) effort. Evaluate any changes or modifications to the established QC procedures in terms of overall effect on contract performance, both positive and negative. Evaluate the contractor's receipt and response to customer complaints for ensuring that recurring complaints are eliminated. Evaluate the contractor's response to both internal and Governmental corrective actions. Analyze the effectiveness and timeliness of immediate corrective actions as well as long term preventive management actions.

- QC Documentation, Records, and Reports. Evaluate the overall effectiveness of the contractor's documentation, records, and reports related to quality inspections and control. Determine if the documentation, records and reporting system are kept up-to-date as required.

3.2.5.4 BUSINESS MANAGEMENT

- Cost Control. Assess the contractor's ability to control, adjust and accurately project contract costs through control of direct, indirect, and overtime labor costs; economies in use of personnel, energy, materials, computer systems, etc. Assess cost reductions through use of cost savings programs, cost avoidance programs, alternate process methods, etc.

- Compliance with Contract Provisions. Assess the contractor's implementation of the government-accepted subcontracting plan, including the degree to which specific goals were achieved. Assess contractor's provision of a safe work environment; maintenance of accident/incident files; and timely reporting of mishaps. Evaluate the effectiveness of the contractor's equal opportunity, small business, and labor

surplus area programs.

- Government Property. Assess the contractor's implementation of government-approved property control plan, including identification, control, inventory, care, maintenance, and utilization of Government property.

3.3 Weighting of Evaluation Factors. After selection of the performance elements for the AFP, a decision can be made as to their relative importance and an appropriate weight assigned to each. Weights can also be assigned to the evaluation factors. Using the elements and factors described above, a typical weighting scheme would be as follows:

3.3.1. Performance of Work (30% of the total)

- Quality	50%	
- Schedule	30%	
- Info/Data Requirements	20%	
SUBTOTAL	100%	of the above 30%

3.3.2. Technical Management (20% of the total)

- Organization/Personnel	50%	
- Problem Resolution/Comm	50%	
SUBTOTAL	100%	of the above 20%

3.3.3. Business Management (25% of the total)

- Cost Control	60%	
- Contract Compliance	20%	
- Government Property	20%	
SUBTOTAL	100%	of the above 25%

3.3.4. Quality Control (25% of the total)

- QC System Implementation	70%	
- Documentation	30%	
SUBTOTAL	100%	of the above 25%
		TOTAL 100%

3.4. A balance must be achieved in which no incentive is either so insignificant that it offers little reward for the contractor or so large that it overshadows all other areas and neutralizes their motivational effect. The number of factors being incentivized also plays a part. When too many factors are incentivized, then the prospect increases of any one item being too small (and thus overlooked), or the incentives being (or perceived as being) confusing and/or inconsistent with stated objectives.

SECTION 4

ESTABLISHING AND WEIGHTING THE FUNCTIONAL AREAS

4.0. GENERAL. Categories of performance to be incentivized through award-fee contracting should be important to the success or failure of the program so neither the Government nor contractor uses inordinate resources on minor tasks to the detriment of major tasks. It is neither necessary nor desirable to include all functions required by the statement of work as part of the performance evaluation plan. However, those functions selected should be balanced so that contractors, when making trade-offs between evaluation factors, assign the proper importance to all of the critical functions identified. For example, the plan should emphasize technical performance and cost considerations, because an evaluation plan limited to technical performance might result in increased costs out of proportion to any benefits gained. Program history and past performance can be helpful in identifying key problem or improvement areas to focus on during award-fee evaluations.

4.1. In large multi-function contracts, it may become necessary to apply performance elements and evaluation factors to individual functions in order to develop a meaningful overall score that describes the level of contractor performance. In the following example, a typical Directorate of Logistics (DOL) contract is used to demonstrate how individual functions can be broken out and elements and factors applied to each function.

4.1.1 First, the overall work disciplines are identified:

- **Supply**
- **Transportation**
- **Maintenance**
- **Services**

4.1.2 These disciplines are then broken into discrete functions:

- **Materiel Management**
- **Maintenance Supply**
- **Shipping and Receiving**
- **Storage and Issue**
- **Transportation**
- **Electronics Maintenance**

- **Vehicle and General Support Maintenance**
- **Food Service**
- **Laundry**

4.2. Weighting the Functional Areas. The identified functions represent the "technical" performance elements and evaluation factors of performance of work (quality, timeliness and technical data requirements) and technical management (staffing and personnel, efficiency, production control system, problem resolution and communication, budget programming and cost control). The performance elements of quality control and business management overarch the entire contractor's operation and therefore are not applied against individual functions.

4.2.1. One way to weight the functions is to establish each one's worth in terms of their individual estimated cost against the total collective estimated cost. For example:

- **The total estimated cost for all the functions is $l0,000,000.**
- **Materiel Management estimated cost is $250,000 or 2.5% of the total.**
- **Maintenance Supply estimated cost is $250,000 or 2.5% of the total.**
- **Shipping and Receiving estimated cost is $l50,000 or 1.5% of the total.**
- **Storage and Issue estimated cost is $l50,000 or 1.5% of the total.**
- **Transportation estimated cost is $l,500,000 or 15% of the total.**
- **Electronics Maintenance estimated cost is $l,500,000 or 15% of the total.**
- **Vehicle and General Support Maintenance estimated cost is $3,000,000 or 30% of the total.**
- **Food Service estimated cost is $2,900,000 or 29% of the total.**
- **Laundry estimated cost is $300,000 or 3% of the total.**

4.2.2. Another method of weighting each function is to subjectively determine its value to total performance (as opposed to a direct correlation to cost). In this process, a high weight may be assigned to a key function even though its relative cost is very low. For example, if the prime mission of the installation was very dependent on excellent performance in the area of electronics maintenance, it might be considered to be worth 50% of the total.

4.2.3. As contract work progresses from one evaluation period into the next, the relative importance of specific performance criteria may change. The award-fee plan may indicate the relative priorities assigned to the various categories of performance through percentage weightings. If weights are used to communicate relative priorities, the total assigned weights must equal 100 percent

4.2.4. The methods of weighting the functions discussed in this section are only examples. The installation may use either method, a combination of both, or any weighting process that suits their particular needs.

SECTION 5

RATING AND SCORING OF CONTRACTOR PERFORMANCE

5.0. General. Rating and scoring methods translate evaluation findings into recommended earned-award-fee amounts. The contractor begins the evaluation period with 0% of the available award fee and works up to the earned award fee based on performance during that evaluation period. Rating and scoring methods are evaluation tools and are not a substitute for exercising judgment in the award-fee determination process. The award fee determination process must not be reduced to merely a mathematical formula or methodology.

5.1. Considerations for Developing Scores. Some general considerations in the development of contractor rating/scores are discussed below.

5.1.1. When Government actions impact contractor's performance either positively or negatively, consider those actions in the scoring and grading process. Such Government actions include changes in funding allocation or increased emphasis on certain technical requirements that require the contractor to make unexpected and extensive trade-offs with other technical requirements.

5.1.2. Keep the process as clear and simple as possible.

5.1.3. Avoid forcing specially tailored evaluation criteria to fit into a grading table or scoring formula.

5.1.4. The maximum fee should be attainable by the contractor. To be a credible and effective motivator, an award fee contract should provide the contractor with a reasonable opportunity to earn the maximum award fee available. "Reasonable opportunity" for maximum fee generally does not mean absolute perfection in all possible performance areas (although to obtain maximum fee, the contractor's performance should be outstanding in virtually all areas). On the other hand, guaranteeing a contractor the maximum fee on every contract, regardless of the difficulty or complexity, does not adequately address the issues of risk and effort.

5.1.5. Documentation regarding the contractor's performance should be available for the AFDO's review before a decision of the earned-award-fee amount is made. Documentation of assigned

grade points, if grade points are used, is required to support award-fee recommendations.

5.2. Rating and Scoring Performance.

5.2.1. In FORSCOM, the most widely used procedure for rating and scoring contract performance is the use of categories of adjectival and numerical ratings with performance criteria for each category.

Examples of adjectival ratings, numerical ratings and their rating criteria are as follows:

ADJECTIVE RATING	NUMERICAL RATING	RATING DESCRIPTION
Excellent	91-100	Performance is exceptional in all significant aspects. Contractor initiative is evident by quality, timeliness and efficiency of work performed. There are very few (if any) deficiencies with no adverse effect on overall performance. Areas in need of improvement are few and are minor.
Very Good	81-90	Performance is very effective, efficient and fully responsive to contract requirements. There may be a few deficiencies with little or no adverse effect on overall performance; only minor deficiencies.
Above Average	71-80	Performance is effective and fully responsive to contract requirements. Few reportable deficiencies with little or no adverse effect on overall performance.
Satisfactory	61-70	Performance is equivalent to that expected of an average contractor. There may be significant areas where performance is below average, offset by areas of above average performance. Deficiencies exist but are managed or addressed with acceptable diligence and/or results.

Poor/Unsat	**Below 61**	**Performance does not meet acceptable standards in one or more areas. Remedial action is required in one or more areas; deficiencies exist in one or more areas which adversely affect overall performance.**

5.2.2. Zero Score for Poor Performance. No fee will be paid when the total evaluation score is less than "Satisfactory" or less than "61" in the example above. In addition, any factor that receives a score of less than 61 for "poor/unsatisfactory" performance will not be rewarded.

5.2.3. In examining the rating criteria that is used in the above sample to define excellent (91-100), it should be apparent that the highest rating is achievable and does not represent perfect performance.

5.3. Rating And Scoring Cost Control (CPAF Contracts Only). Cost control will be a substantial factor in the award fee plan. The contractor's success in controlling costs must be measured against contract estimated costs, and not against budgetary or operating plan costs. The following guidelines will help ensure that cost control receives the proper emphasis:

5.3.1. If there is a cost overrun, consider the reasons for the overrun and the contractor's efforts to control or mitigate it. If there is a significant cost overrun that was within the contractor's control, a score of zero may be given. If the overrun is less than significant, a higher score may be given.

5.3.2. If there was a cost overrun in the previous award fee evaluation period, consider the contractor's efforts to control or mitigate it. If the cost overrun continues to grow and was within the contractor's control, a score of zero may be given. If the overrun is lessening, a higher score may be given.

5.3.3. If the maximum score for cost control is given when the contractor achieves the negotiated estimated cost of the contract, there may be no incentive for cost underruns. Some lesser score may be assigned indicating the degree to which the contractor has prudently managed costs while meeting contract requirements.

5.3.4. Cost underruns within the contractor's control will normally be rewarded. However, cost underruns may not indicate good cost control unless the actual effort during the evaluation

period matches that originally proposed or planned. The extent to which the underrun is rewarded will depend on the size of the underrun and the contractor's level of performance in the other categories of performance.

5.3.5. When the contractor achieves the negotiated estimated cost of the contract, it should not receive the maximum score for cost control. The maximum score for cost control should only be awarded for achieving an underrun. Some lesser score will be assigned, reflecting the degree to which the contractor has prudently managed costs while meeting contract requirements.

5.5.6. The predominant consideration when evaluating cost control should be an objective measurement of the contractor's performance against the estimated cost of the contract, including the cost of undefinitized contract actions when appropriate.

5.5.6.1. The estimated cost baseline should be adjusted to reflect cost increases or decreases associated with changes in Government requirements or funding schedules which are outside the contractor's control. In some circumstances, contract costs might increase for reasons outside the contractor's control and for which the contractor is not entitled to an equitable adjustment, such as weather-related launch delays or changes made which fall below contract change thresholds. Such situations should be taken into consideration when evaluating contractor cost control.

5.5.6.2. In the case of contracts for services where contractor performance is consistent and complete within each evaluation period and does not carry over into succeeding periods, negotiated estimated cost can generally be apportioned among the evaluation periods. Cost control for each evaluation period can then be measured against that period's share of the estimated costs.

SECTION 6

DEVELOPING THE RECOMMENDED AWARD FEE

6.1. Fee Recommendation.

6.1.1. Developing an award fee recommendation involves the correlation and assimilation of performance elements; evaluation factors; functional area weights; ratings and scores; and award fee pool. This process is usually accomplished by the activity responsible for contract administration and is included as part of the contractor evaluation package submitted to the Award Fee Evaluation Board (AFEB) for its consideration.

6.1.2. Since the recommended fee is a specific dollar amount derived in most part by a mathematical process using weights and scores, it may appear to be very objective. However, the basic scoring system uses subjective rating criteria and adjectival ratings (excellent, good, etc.) to derive the initial score.

6.2. Weighting Functions. Figure 3 shows the weighted function score worksheet for one function (material management). Figure 4 shows a recapitulation sheet for the weighted scores for all performance elements evaluated.

6.3. Award Fee Conversion Table. The scores may be converted to a specific recommended amount of fee by using an award fee conversion table, chart or graphs with formulas that translate the contractor's overall score (i.e., performance points) into the earned-award-fee amount. This conversion may or may not be a linear relationship. The earned-award-fee amount indicated by the use of a conversion table or graph is a guide to the AFEB and AFDO. Use of a conversion table or graph does not remove the element of judgment from the award-fee process. Regardless of the method used, zero award fee will be earned for an overall Unsatisfactory performance.

6.3.1. Linear Relationship between Score and Fee Percentage. One method of conversion is linear, a straight point-to-percentage conversion of overall performance above Unsatisfactory. For example, if a contractor receives an "Excellent" grade with an overall score of 91, the contractor would also receive 91% of the available award fee for that evaluation period.

6.3.2. Non-linear Relationship between Score and Fee

Percentage. The following graphs depict non-linear relationships between points and percentage of overall performance above Unsatisfactory. The grades in these examples are:

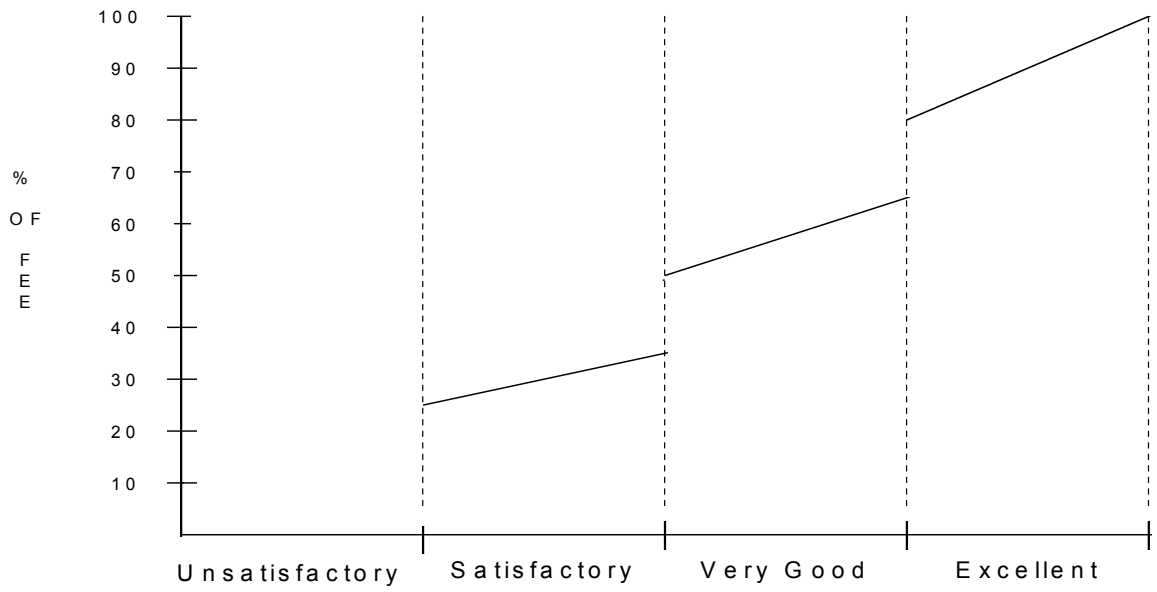
Unsatisfactory	**Below 70**
Satisfactory	**71-80**
Very Good	**81-90**
Excellent	**91-100**

(Note: The grades and scores in these examples have four levels, as compared to the five levels (Excellent, Very Good, Above Average, Satisfactory and Unsatisfactory) described in Section 5. The number of grades/scores is discretionary and should be tailored for each contract requirement.)

Example 1:

In this example, an overall score of 80 points receives 33% of the available award fee; an overall score of 87 points receives 51%; an overall score of 88 points receives 60% of the available award fee, an overall score of 92 points receives 70% of the available award fee, and an overall score of 98 points receives 91% of the available award fee.

Example 2:



In this example, an overall score of 80 points also receives 33% of the available award fee. However, an overall score of 87 points receives 60%; an overall score of 88 points receives 65% of the available award fee, an overall score of 92 points receives 82% of the available award fee, and an overall score of 98 points receives 96% of the available award fee.

6.3.3. An example of a typical conversion table is included in the sample Award Fee Plan at Appendix A. Additional approaches to conversion tables are presented at Appendix C.

Figure 3. WEIGHTED FUNCTION SCORE WORKSHEET

FUNCTION: MATERIEL MANAGEMENT

	INITIAL NUMERICAL RATING	EVALUATED FACTOR WEIGHT	PERFORMANCE ELEMENT WEIGHT	FUNCTION WEIGHT	WEIGHTED FUNCTION SCORE
PERFORMANCE OF WORK:					
_____QUALITY	_____	x .50 =	_____		
_____TIMELINES	_____	x .30 =	_____		
___ TECHNICAL DATA REQUIREMENTS	_____	x .20 =	_____		
TOTAL			_____ x .25 = _____	x.025 =	_____
TECHNICAL MANAGEMENT:					
STAFFING & PERSONNEL	_____	x .25 =	_____		
EFFICIENCY	_____	x .35 =	_____		
PROBLEM RESOLUTION	_____	x.40 =	_____		
TOTAL			_____x.25 = _____	x .025 =	_____

Figure 4. RECAPITULATION SHEET FOR ALL PERFORMANCE ELEMENTS

PERFORMANCE ELEMENT	FUNCTION	WEIGHTED SCORE
I. PERFORMANCE OF WORK	Materiel Management	_____
	Maintenance Supply	_____
	Shipping and Receiving	_____
	Storage and Issue	_____
	Transportation	_____
	Electronic Maintenance	_____
	Vehicle and General Support Maintenance	_____
	Food Service	_____
	Laundry	_____
	TOTAL WEIGHTED SCORE (I)	_____
II. TECHNICAL MANAGEMENT	Materiel Management	_____
	Maintenance Supply	_____
	Shipping and Receiving	_____
	Storage and Issue	_____
	Transportation	_____
	Electronic Maintenance	_____
	Vehicle and General Support Maintenance	_____
	Food Service	_____
	Laundry	_____
	TOTAL WEIGHTED SCORE (II)	_____
III. BUSINESS MANAGEMENT	All	_____
IV. QUALITY CONTROL	All	_____
TOTAL WEIGHTED SCORE FOR I THROUGH IV		_____

SECTION 7

PLANNING FOR THE AWARD FEE PROCESS

7.1. Early Planning.

7.1.1. Comprehensive procurement planning should begin in the early stages of the contracting cycle when the requirement for a contract is established. Discussions among functional, legal, contracting and other personnel can go far toward initiating timely actions leading to the successful development and administration of the AF contract.

7.1.2. Early planning activities for AF contracting include such actions as:

- The development of terms and conditions for the solicitation that identify award fee features and how they should be addressed in submitted offers.

- The development of contract clauses that specify award fee features.

- The development of a comprehensive Award Fee Plan (AFP), including the organizational structure needed for assessing and evaluating contractor performance and determining the award fee amount.

- The identification and commitment of resources that will be required to adequately administer the award fee process, including surveillance personnel.

7.2 The Award Fee Plan (AFP).

7.2.1. Although award-fee contracting allows for judgmental evaluation of the contractor's performance, it must follow a disciplined approach. The purpose of the AFP is to articulate in one document the plan and means for identifying, assessing and evaluating contractor performance for determining the award fee to be awarded. This document ensures the integrity of the award-fee evaluation process. Over the contract period, the documentation should demonstrate that the process set out in the award-fee plan has been followed, and that both the rating recommendations and final award fee amount decisions have been based on actual performance evaluated according to the award-fee

plan. Timely feedback should be provided to the contractor so that he understands fully the government's assessment of performance strengths and weaknesses. The plan also serves as a charter for the organizational structure required to administer the award fee provisions of the contract.

7.2.2. A typical AFP will include the following elements:

- **Amount of the award fee pool available for each evaluation period**
- **Functional areas to be evaluated**
- **Criteria to be used in evaluations**
- **Relative weights to be assigned to functional areas and the evaluation criteria**
- **Evaluation periods**
- **Method for measuring and evaluating performance for each evaluated area**
- **Organizational structure for evaluating performance and determining the award fee amount**
- **Contractor participation in the award fee determination process**
- **Reporting and record keeping procedures**
- **Award Fee Conversion Chart**
- **Method for implementing any changes to the AFP**

7.3 Developing The AFP

7.3.1. Development of an AFP requires a team effort involving personnel from a variety of disciplines (e.g. functional, legal, contracting). It is important that team members are identified as early as possible in the planning process and that they be informed of their responsibilities in contributing to the development of the plan.

7.3.2. The AFP is an internal Government document and is procurement sensitive. Government personnel who work on the plan should be briefed about the close hold nature of the plan. Likewise, it is important to undertake the early selection of the Award Fee Determination Official (AFDO), the Award Fee Evaluation Board (AFEB) chairman and members, and to establish their responsibilities.

7.3.3. The AFP may be included in the contract as an attachment, for informational purposes only. If it is included in the contract, it must contain language which allows the Government to change the plan unilaterally, thus preserving the Government's right to alter the plan unilaterally to reflect any

changes occurring in management emphasis or concern.

7.3.3.1. The contractor should be given a copy of the current AFP and must be informed of any significant changes in advance of the evaluation period or periods to which it applies.

7.3.3.2. The fact that the plan can be unilaterally changed does not give the Government the right to unilaterally change other award fee provisions or other terms of the contract, absent contract language allowing it to do so.

7.3.4. Since the AFP details the procedures for implementing the award fee provisions of the contract, the plan should be approved initially by the contracting officer before it is submitted to the AFDO for final approval.

7.3.5. The AF plan should:

- Provide for evaluations of contractor performance levels, taking into consideration contributing circumstances and contractor resourcefulness;

- Focus the contractor on areas of greatest importance in order to motivate it to make the best possible use of company resources to improve performance;

- Clearly communicate evaluation procedures and provide for effective, two-way communication between the contractor and the Government personnel responsible for evaluating performance and making award fee determinations;

- Provide for an equitable and timely evaluation process;

- Establish an effective organizational structure, commensurate with the complexity and dollar value of the particular procurement, to administer the award fee provisions;

- Be kept as simple as feasible; the simpler the plan, the more effective it is likely to be.

7.3.6. An AF contract cannot function well unless the contractor is confident that the award fee process is fair. Award fee earnings must be commensurate with achieved performance levels. An award fee determination is unlikely to have a positive influence on future performance levels if, for instance, it is not promptly awarded and paid.

7.3.7. To assure positive motivation, the highest performance levels contemplated by the plan should be reasonable and attainable. Unachievable expectations serve as a disincentive since by definition they cannot be met. The plan should also encompass an evaluation of performance levels and the conditions under which these levels can be achieved.

7.4. Evaluation Periods. Award-fee evaluation periods should not exceed six months for small businesses or one year for large businesses. Evaluation periods that are too short can prove administratively burdensome, lead to hasty evaluations or late award-fee determinations, and allow insufficient time for the contractor to improve areas of weakness. On the other hand, if the evaluation periods are too long, effective communication between contractor and Government is jeopardized and opportunities to influence the contractor's performance are diminished. Quarterly evaluations (every three months) are the most widely used; however, tri-annual (every four months) and biannual (every six months) evaluations should also be considered.

7.5. Changes to the Award-Fee Plan. All changes to the AFP should be coordinated with the AFEB and sent to the approval authority.

7.5.1. For significant award-fee plan changes, the approval authority is the AFDO. Examples of significant changes include changing evaluation criteria, adjusting weights to redirect contractor's emphasis to areas needing improvement, and revising the distribution of the award-fee dollars.

7.5.2. For administrative and other changes (such as changes in the make-up of the AF organization), the approval authority may be the AFEB chairperson or the ACO.

7.5.3. After approval, the contracting officer shall notify the contractor in writing of any change(s). Significant changes should be accomplished by mutual agreement; administrative changes do not require mutual agreement.

SECTION 8

ORGANIZING THE AWARD FEE PROCESS

8.0. General. The most effective organizational approach for AF contracting will differ with each particular situation. The overall objective in all cases is an equitable and timely procedure that does not create or impose an unreasonable administrative burden given the value and complexity of the specific contract effort.

8.1. The following are some basic guidelines concerning the organization and administration of award fee contracts:

- Avoid creating too many organizational layers. Excessive layers contribute to unnecessary paperwork, delays in turnaround time, and inordinate staffing demands.

- The objective is to evaluate performance, not micromanage it. The Government tells the contractor what results are expected and are important. It then evaluates and rewards the contractor as appropriate for achieving the desired results. Communication with contractor personnel about performance should not lead to Government direction of efforts in a manner that compromises the contractor's responsibility or ability to manage under the contract.

8.2. Award Fee Determination Process.

8.2.1. It is extremely important that the award fee determination process covered in the AFP contain appropriate checks and balances for maintaining its impartiality. Monitoring, assessing and reporting should be performed by people knowledgeable of the contract requirements; the results of their assessments should be subject to an evaluation by officials at the management level who are not involved in daily, on-line operational interface with the contractor. The evaluation process should assure both the contractor and the Government that informed and reasonable judgments have been made in determining the award fee earned.

8.2.2. Contractor readiness to accept and react to award fee determinations in a constructive manner is dependent on the belief that evaluation procedures are fair and serve to protect the performer against arbitrary or capricious determinations. The motivation to perform under an AF contract is enhanced to

the extent that the award fee determination process is not only portrayed as fair, but demonstrates its integrity in practice. This includes awareness that award fee determinations will be made at a level that assures management attention and objectivity.

8.2.3. Cautionary Note Concerning Award Fee Decisions. In February 1999, the Under Secretary of Defense (Acquisition and Technology) issued a memorandum stating his concerns that award fees earned by contractors were not always commensurate with overall performance. He cautioned contracting officers and AF managers to periodically review the award fee process to ensure that evaluation factors (award fee periods, evaluation criteria, earned award fee percentages, etc.) were suitable for the intended positive outcome, and that the performance evaluations accurately reflected overall contract performance.

8.3. Organization. While no single award fee determining organization and administration will fit all situations equally well, all organizations should contain a basic three level structure consisting of the:

- **Award Fee Determination Official (AFDO)**

- **Award Fee Evaluation Board (AFEB); and**

- **Performance evaluation and monitoring activities**

8.4. Participants and Their Responsibilities.

8.4.1. Award Fee Determining Official (AFDO). The AFDO will be an individual who is at a higher level organizationally than the people who are involved directly in performance evaluation. The AFDO is appointed by the Principal Assistant Responsible for Contracting (PARC). The AFDO will in turn appoint the Award Fee Evaluation Board and its Chairperson. The AFDO should be identified in the evaluation plan by position title only, when the plan is included in the contract. This clearly establishes the level of the award free determination, while eliminating the need to modify the contract in the event there is a change in the incumbent AFDO.

8.4.1.1. The primary responsibilities of the AFDO are:

- **Approving the award fee plan and any significant changes required during performance.**

- Establishing the AFEB;

- Considering the AFEB Report for each evaluation period;

- Making the final determination regarding the award fee earned and payable for each evaluation period;

- Ensuring the award-fee process integrity is maintained throughout the program;

- Issuing and signing the award fee determination report or letter for the evaluation period, specifying the amount of award fee determined and the basis for that determination.

8.4.1.2 The AFDO's decisions regarding the award fee (including but not limited to: the amount of the award fee, if any; the methodology used to calculate the award fee; the calculation of the award fee; the contractor's entitlement to the award fee; and the nature and success of the contractor's performance) are unilateral agency determinations subject only to a requirement that such decisions not be arbitrary and have a reasonable basis.

8.4.1.3. The AFDO must ensure that the amount and percentage of award fee earned accurately reflects the contractor's performance. If the AFDO's final decision varies either upward or downward from the AFEB's recommendation, the rationale for the change shall be documented in the official contract file.

8.4.1.4. Proper documentation is essential to ensure the AFDO decision does not appear arbitrary and capricious. The AFDO decision letter should include the earned-award-fee amount and address the contractor's strengths and weaknesses for the evaluation period. The decision letter should not include the names of individuals that work for the contractor, or the internal rating scores of AFEB members.

8.4.1.5. The AFDO provides the determination to the contracting officer as quickly as possible, but not later than 45 calendar days after the end of the period being evaluated. The AFDO should always provide a debriefing to the contractor after the rating ha been issued. The debriefing duty can be delegated.

8.4.2. Award Fee Evaluation Board (AFEB). The AFEB evaluates the contractor's overall performance (based on input from the activities responsible for monitoring contractor performance) and recommends the amount of award fee to the AFDO. The AFEB

should bring to the evaluation process a broader management perspective than exists at the level of the performance monitoring activities. Accordingly, the AFEB should be comprised of relatively high management personnel. Members of the AFEB are appointed by the AFDO. It is important to establish the Board in sufficient time so it can develop (or ensure development of) and distribute an approved AF Plan BEFORE the start of the first evaluation period.

8.4.2.1. The AFEB reviews the performance evaluations; the contractor's self-assessment, if any; and other pertinent information to arrive at an overall evaluation of the contractor's performance. The AFEB may request Performance Monitors to discuss their evaluations so that the AFEB gains further insight into the contractor's performance. The AFEB may also invite the contractor to present a self-assessment of its performance for the evaluation period being considered.

8.4.2.2. The membership of the board should be based on the nature, dollar value and complexity of the procurement. The only required members of the AFEB are a Chairperson, the Administrative Contracting Officer (ACO), and a Recorder. Membership may also include individuals responsible for (or customers of) the primary technical and business functions associated with the contract, who are familiar with the performance areas of the contract. It is important that AFEB members be able to devote enough time to their respective assignments to perform thorough and prompt evaluations. Members should be identified only by position to eliminate the need for administrative changes to the AF plan when an individual member changes.

8.4.2.3. AFEB members:

- Must be familiar with the award-fee process, contract requirements, and the award-fee plan.

- Assess the contractor's overall performance for each award-fee plan criterion. It is important that the AFEB evaluate the contractor's overall performance according to the criteria stated in the award-fee plan.

- Document the AFEB's results to show how the AFEB arrived at the recommend earned-award-fee amount presented to the AFDO. This documentation may include Performance Monitors' evaluations; the contractor's self-evaluation, if any; briefings presented to the AFEB; and other data considered.

- Recommend changes to the award-fee plan to the AFDO to reflect program evolution.

8.4.3. AFEB Chairperson (or Facilitator). The AFDO should not be the AFEB chairperson. Although this practice would eliminate some procedural steps and related documentation, the integrity of the award fee determination system and process might be compromised by removing one of the essential checks and balances. The functions of the chairperson/facilitator include:

- Calling board meetings, controlling attendance and chairing the meetings.

- Requesting and obtaining performance information from other activities or people who receive benefits from or observed contractor performance.

- Responsibility for the preparation and approval of the board's award fee recommendation and other complete documentation of all board activities.

- Briefing the AFDO on recommended earned-award-fee amounts and the contractor's overall performance.

- Recommending significant award-fee plan changes to the AFDO.

- Approving award-fee plan changes that do not require AFDO approval.

8.4.4. AFEB Recorder. The AFEB Recorder is designated by the AFEB Chairperson, and is the administrative backbone of the award-fee process. The Recorder is responsible for coordinating the administrative actions required by the AFDO, AFEB, and Performance Monitors. Although the Recorder is a member of the AFEB, this position may be performed by a member with other functions on the AFEB. The Recorder:

- Notifies Performance Monitors that their evaluations are due.

- Receives, processes and distributes evaluation reports from all required sources and maintains official files.

- Schedules and assists with internal evaluation milestones, such as briefings.

- Accomplishes other actions required to ensure the smooth operation of the award-fee process, such as documenting the AFEB activities.

- Retains all Performance Monitors' evaluation reports, if they are not included in the official contract file.

- Retains other pertinent data not contained in the official contract file.

8.4.5. Administrative Contracting Officer (ACO)

8.4.5.1. The ACO is a member of the AFEB and is the liaison between the Government and the contractor.

8.4.5.2. The ACO transmits AFDO decision letters to the contractor, and prepares and distributes the modification awarding the fee authorized by the AFDO within 15 calendar days after the AFDO decision.

8.4.5.3. The ACO is to ensure that the award-fee amount is certified and administratively reserved prior to the beginning of the applicable award-fee evaluation period. The ACO will ensure that all unearned-award-fee funds are de-committed after each evaluation period.

8.4.5.4. The ACO notifies the contractor in writing of any approved change(s) to the award-fee plan. If the ACO does not give specific notice to the contractor of any change to the evaluation criteria prior to the start of a new evaluation period, then the same criteria listed for the preceding period will be used in the following award fee evaluation period.

8.4.4.5. The ACO ensures an audit trail is in place to substantiate the AFEB recommendation and AFDO final decision. In addition to the required documents already in the official contract file such as the award-fee plan, appointment letters, etc., the official contract file should also contain the following documentation for each separate evaluation period:

- A copy of the AFDO briefing.

- A copy of the AFDO's decision letter to the contractor providing the earned-award-fee amount, strengths, weaknesses, and future areas of emphasis, if any.

- Supporting rationale if the AFDO's final decision of earned-award-fee amount differs from the AFEB recommendation.

- Contractor's self assessment, if any.

- Funding documents.

8.5. Performance monitoring. Primary responsibility for the overall monitoring, assessment, and reporting of contractor performance rests with the ACO. As a general rule, the ACO staff monitors and assesses contractor performance for the business management and quality control performance elements. Designated Contracting Officer's Representatives (COR) and/or technical monitors assess the performance of work and technical management elements.

8.5.1. Performance Monitors must provide justification for their ratings and document both strengths and weaknesses in their areas of responsibility. It may be helpful to have a worksheet for each category of performance and evaluation criteria that mirror the award-fee plan. The performance monitors' written records should be maintained until contract close-out.

8.5.2. Performance Monitors/CORs provide the continuous evaluation of the contractor's performance in specifically assigned areas of responsibility. Performance Monitors are working-level specialists, such as engineers, quality assurance evaluators (QAEs), or functional area evaluators, or technical monitors who are familiar with their assigned evaluation areas of responsibility. Technical performance monitors will <u>not</u> be members of the AFEB.

8.5.3. In performing their duties, monitors should: maintain ongoing communication with their contractor counterparts, conduct assessments in an open, objective and cooperative spirit, and emphasize negative performance as readily as positive performance.

8.5.4. The primary responsibilities of the COR/performance monitors include:

- Monitoring (not directing), evaluating and assessing contractor performance for assigned areas. This activity is conducted according to contract requirements and the award fee plan so that evaluations are fair and accurate.

- Maintaining records of the contractor's performance in their assigned evaluation area(s) that detail specific examples where improvement is necessary or desired; where improvement has occurred; and where performance is below, meets or exceeds contract requirements.

- Providing periodic reports to the ACO relative to contractor performance, as instructed by the ACO.

- Briefing the AFEB on their specific evaluation areas, as needed.

8.5.5. The ACO and staff are also a part of the performance monitoring process. On a very large and complex contract, the ACO is usually the Chief of the Contract Administration office/function. When this is not warranted, a contract specialist/administrator normally fills the position. The staff of the ACO may contain such expertise as:

- **Contract Specialist/ Administrator**
- **COR/ QA Specialist/ Technical Monitor**
- **Property Administrator**
- **Cost and Pricing Specialist**
- **Administrative Support Personnel/ Recorder**

8.6. Training. Training of all personnel involved in the award fee process is essential for successful monitoring and evaluation of contractor performance. Training should cover such things as the award fee plan, roles and responsibilities, documentation requirements, and evaluation techniques. Training should address:

- What is being evaluated?

- How will information be gathered; what techniques will be used? (e.g., inspection, sampling of work, observation, review of reports or correspondence, or customer surveys)

- When or how often will information be obtained (e.g., daily, weekly or monthly)?

- How will performance monitors secure information from functional specialists to cover areas in which the monitors may not be personally involved?

- Evaluation scoring processes and the need for consistency between scoring and evaluation summaries.

SECTION 9

ADMINISTRATIVE MATTERS

9.1. Quality Assurance. An AF contract, as with any contract, requires that a systematic government quality assurance (QA) program be implemented and documented in a Quality Assurance Surveillance Plan (QASP). In addition to the performance surveillance described in 9.1.1 below, the AF QASP should also describe the methods and procedures for evaluating contractor performance in each of the AF evaluated areas, e.g., Cost Control, Business Management, as well as quality and timeliness.

9.1.1. Performance Surveillance

9.1.1.1. The Office of Federal Procurement Policy October 1980 document entitled, "A Guide for Writing and Administering Performance Statements of Work for Service Contracts" (commonly called OFPP Pam 4) is the current standard for developing statements of work. The use of this guide is mandatory for Army Commercial Activities service contracts, and is primarily intended for firm fixed-price (FFP) contracts; however, most of the guidance concerning contract surveillance is applicable to any type of contract.

9.1.1.2. The methods of surveillance described in OFPP Pam 4 - random sampling, management information systems, 100% inspection and customer complaints - are still valid ways to inspect the quantifiable portions of the contractor's performance. The major difference is in the use of the Performance Requirements Summary (PRS) as an enforcement tool. The PRS may be used in the FPAF contract; however, it is not used in a CPAF contract. A matrix similar to the PRS can be developed as an evaluation tool as part of the QASP, but it is not included in the CPAF contract.

9.1.2. Quantitative and Qualitative Standards. Once evaluation factors are selected, standards or criteria are developed for measuring contractor performance and assessing the amount of award fee earned.

9.1.2.1. Quantitative or objective performance measurement standards are based on well-defined parameters for measuring performance. They include customer surveys, inspection reports and test results. Quantitative measures should be used whenever the given performance can be precisely or finitely measured.

9.1.2.1.1. Sufficient information or experience must be available to permit the identification of realistic standards against which quantitative measurements may be compared.

9.1.2.1.2. Any comparison of contractor performance against quantitative standards in the award fee environment will need to be tempered by a qualitative evaluation of existing circumstances. Any reasonable assessment of effectiveness requires an evaluation process encompassing both performance levels and the conditions under which those levels were achieved. To be realistic, any standard (or range of acceptable performance levels) should reflect the nature and difficulty of the work involved.

9.1.2.2. Qualitative or subjective performance standards rely on the evaluator's opinions and impressions of performance quality. Qualitative assessments must be as informed as possible and not rely on personal bias or a purely intuitive feeling.

9.1.2.2.1. Some examples of qualitative standards are: responsiveness to government input or changes; employee morale, appearance and/or conduct; self-initiated and timely planning of activities; effective utilization of personnel; quality of responses; etc.

9.1.2.2.2. Another example of a qualitative standard is a questionnaire requiring "yes" or "no" answers, with a high proportion of "yes" answers indicative of high quality performance. Note that narrative support for questionnaire answers is required.

9.1.2.3. Where feasible, quantitative or objective measures are preferred over qualitative or subjective ones. The greater the ability to identify and quantify the facts considered in arriving at a judgmental assessment, the more credible that assessment is likely to be (and the easier it will be to prepare the supporting documentation required).

9.1.3. While surveillance of measurable performance establishes a quantifiable, objective basis for documenting the contractor’s performance, some of the technical areas evaluated for award fee will frequently require or be influenced by personal opinions or judgments, e.g., responsiveness, cooperation, innovation. Contracting officers, in their role of facilitation and promoting fairness and good working relationships with the contractor, must be alert to negative or adversarial situations

and take appropriate steps to resolve or eliminate them.

9.2. Contract Termination. If the contract is terminated for convenience of the Government after the start of an award-fee evaluation period, the earned-award-fee amount will be determined by the AFDO using the normal award-fee evaluation process. The remaining available-award-fee dollars for all subsequent evaluation periods will not be considered available or earned and, therefore, shall not be paid.

9.3. Evaluation of Delivery Or Task Order Contracts

9.3.1. A delivery or task order contract may provide for orders with specific requirements that are independent of any other orders' requirements, and that have separate, distinct sources of funding. For such orders, an award fee amount could be allocated to each individual order along with the estimated cost. Contractor performance on each order would be evaluated against the award fee criteria on a task-by-task basis.

9.3.2. There are instances where the government wants to motivate the contractor's performance at the contract level versus each individual order. This condition may exist when the overriding objective is not how each individual order is executed, but how the contractor's performance of multiple orders contributes to meeting the overall contract objectives. For example, it may not be cost effective to evaluate contractor performance on a task order basis, or when unknown/undefined requirements may materialize during the contract. An unknown requirement may arise that has a higher priority than an existing order.

9.3.3. The primary objective is for the government/contractor team to make trade-offs between the orders in a constrained environment (funding, staffing, etc.) to ensure the optimal performance level. Therefore, the ultimate measure of success is judged as meeting the overall contract objectives and not necessarily on the performance of a single order. In this case it is in the government's best interest to incentivize the contractor to focus its efforts and perspective on overall contract performance versus the individual orders. This does not preclude management of individual orders.

9.3.4. To ensure that there is no confusion about how the contractor's performance will be evaluated, the award fee plan must clearly state whether the evaluation criteria are applicable at the contract or individual order level.

APPENDIX A

SAMPLE 1

AWARD-FEE PLAN FOR CPAF CONTRACT

(COVER SHEET: Fill-in information is shown in bold italics.)

AWARD-FEE PLAN

FOR

(TITLE OF PROGRAM)

(DATE OF APPROVAL)

(Contractor's Name)

COORDINATED:

_____

Contracting Officer

APPROVED:

_____

Award Fee Determining Official

AWARD FEE PLAN – CONTRACT DAKFXX-XX-X-XXXX

Table of Contents

Attachments

(Title of Program)
(Contract No.)

AWARD FEE PLAN

1. PURPOSE: This award fee plan (AFP) describes the policies and procedures for determining award fees and outlines the duties and responsibilities of personnel associated with the award fee process.

2. SCOPE: This plan, in conjunction with the Quality Assurance Surveillance Plan and the Contract Administration Plan, enables the Administrative Contracting Officer (ACO) to develop award fee recommendations. It describes the methodology used to calculate award fees and for presenting an written assessment of contractor performance. It also provides for the contractor to receive and comment on periodic performance evaluations, and for making changes to the AFP as warranted by circumstances.

3. ORGANIZATION: The award fee process involves personnel within the ___(*identify installation organizations*)___ and other installation organizations. The organization may change from time to time; however, the basic responsibilities described herein shall continue during the term of the contract.

4. RESPONSIBILITIES:

4.1 Administrative Contracting Officer (ACO). The ACO is the person administering the contract on behalf of the Government. The ACO is responsible for ensuring that contractor performance reports are completed by assigned personnel in a timely and proper manner. The ACO is responsible for prepartion of the initial award fee recommendation for consideration by the Award Review Board. The ACO transmits the award fee determination letter to the contractor, and advises the contractor of any changes in the AFP.

4.2 Contracting Officer's Representative (COR). The COR is a Government employee, selected and designated in writing by the ACO to act as his authorized representative in administering the contract. The COR will evaluate the contractor's performance within designated functional areas and perform other duties as authorized by the ACO.

4.3 Award Fee Evaluation Board (AFEB). Members of the AFEB are designated personnel who review the recommended award fee submitted by the ACO. The AFEB assures that the recommendations

are consistent with available data. The board may submit changes to fee recommendations to the Award Fee Determining Official (AFDO). The AFEB members are listed at Attachment A.

4.3.1 AFEB Chairperson. This person is appointed by the AFDO and is responsible calling board meetings and chairing the meetings. The Chairperson is also responsible for preparation of the board's award fee recommendation; full documentation of the board's activities; briefing the AFDO on recommended earned-award-fee amounts and the contractor's overall performance; and recommending significant award-fee plan changes to the AFDO.

4.3.2 AFEB Recorder: The AFEB Recorder is designated by the AFEB Chairperson, and is responsible for coordinating the administrative actions required by the AFDO and AFEB. These actions include notifications to performance monitors that their evaluations are due; receiving, processing and distributing evaluation reports; and documenting AFEB activities.

4.4 Award Fee Determining Official (AFDO): The AFDO is the designated official who determines the fee to be awarded to the contractor based on recommendations submitted by the AFEB. The determination is provided to the ACO for disposition and payments to the contractor.

5. AWARD FEE REQUIREMENTS:

5.1 The total award fee earned by the contractor shall be determined quarterly based on evaluations of the contractor's performance. The available award fee for each evaluation period is shown in Attachment 2.

5.2 The performance criteria used for development of the recommended award fee are shown below. These criteria will remain throughout the life of the contract unless changed by a modification (if required), and the ACO gives written notice to the contractor.

5.2 1 PERFORMANCE OF WORK:

5.2.1.1 <u>Quality</u>. The contractor's compliance with contract specifications and regulatory procedures will be evaluated by the CORs, COR staff and/or technical monitors to determine if the quality established in the contract and regulatory guidelines is being met.

5.2.1.2 <u>Timeliness</u>. The contractor’s compliance with

processing times, reporting requirements, and production schedules will be evaluated. The evaluation will determine if the contractor is performing effectively under the schedules and time frames established in the contract.

5.2.1.3 Technical Data Requirements. The contractor's reports, records, schedules, etc., will be evaluated for accuracy, completeness, and quality as required in the contract.

5.2.2 TECHNICAL MANAGEMENT:

5.2.2.1 Staffing and Personnel. The contractor's recruitment, placement and training programs to insure that the contractor provides the necessary trained personnel to meet performance requirements will be evaluated. The contractor's utilization of personnel will be evaluated to determine degree of efficiency and effectiveness. Factors such as control of nonproductive time, use of skills appropriate to the tasks, classification of personnel for required tasks, adequacy of supervision, work scheduling and assignments, and use of materials and supplies will be evaluated.

5.2.2.2 Problem Resolution and Communication. The contractor's decisions, recommendations, and actions to anticipate and proactively resolve problematic situations will be evaluated. The adequacy, accuracy and efficiency of the contractor's communication with the Government will be assessed, as well as the authority, responsibility, and initiative displayed by the contractor in problem resolution. The degree to which the contractor relies on the Government for guidance or decisions in areas that are properly the contractor's responsibility will be evaluated.

5.2.3 BUSINESS MANAGEMENT

5.2.3.1 Cost Control. The contractor's efforts to control and reduce costs through effective cost accounting and collection systems, budgeting procedures and programming techniques will be evaluated. Whenever the contractor's actual costs significantly vary from anticipated costs, a detailed analysis of the reasons for the variation and an assessment of the contractor's role in creating or contributing to the variance will be performed.

5.2.3.2 Subcontracting Plans and Practicies. The contractor's implementation of the accepted subcontracting plan, including the degree to which specific goals were achieved, will be assessed. The effect on contract performance will be assessed

relative to the contractor's supplier and subcontracting operations and management, small business and labor surplus area programs, and degree of competition obtained.

5.2.3.3 Government Property. The contractor's implementation of the contractor's property control plan will be evaluated. Government property identification, control, reporting, inventory, care, maintenance, and utilization will be assessed for compliance with the property control plan approved by the government.

5.2.3.4 Management/Employee Programs. The contractor's labor relations efforts and the resultant impact on contract performance will be evaluated. The effectiveness of the contractor's programs for equal opportunity, safety, employee incentives, energy conservation, and upward mobility will be assessed.

5.2.4 QUALITY CONTROL

5.2.4.1 Quality Control System Implementation. The implementation of the quality control plan (QCP) will be evaluated to determine the effectiveness of the program in regards to the service provided to the government. The effect of changes or modifications to the QCP for correction of recurring problems or deficiencies will be evaluated. The overall performance of the customer feed-back and/or complaint program will be assessed.

5.2.4.2 Corrective Action. The contractor's response to both internal and Government corrective actions will be evaluated. The effectiveness and efficiency of immediate problem resolution actions and long term preventive management actions will be assessed.

5.2.4.3 Documentation, Records, and Reports. The overall effectiveness and timeliness of the contractor's documentation, records maintenance, and reporting of quality related issues will be evaluated.

5.3 The performance criteria are weighted to express their relative importance. These weights are assigned with the assumption that no significant incident has occurred during the monthly evaluation cycle that is of such magnitude that it merits waiver of these weights. Any change in the criteria weights is the responsibility of the ACO and must be supported in writing.

5.3.1 The relative weights of the performance elements and evaluation factors are:

5.3.1.1. Performance of Work (% of the total)

- **Quality (%)**
- **Timeliness**
- **Technical Data Requirements**

5.3.1.2. Technical Management (% of the total)

- **Staffing and Personnel**
- **Efficiency**
- **Problem Resolution and Communication**

5.3.1.3. Business Management (% of the total)

- **Cost Control**
- **Subcontracting Plans and Practices**
- **Government Property**
- **Local Autonomy**
- **Management/Employee Programs**

5.3.1.4. Quality Control (% of the total)

- **System Implementation and Maintenance**
- **Corrective Action**
- **Documentation, Records and Reports**

5.4 Each evaluation factor has been assigned an adjective and numerical rating for each monthly evaluation period. The adjective rating, numerical rating and their corresponding rating description are as follows:

ADJECTIVE RATING	NUMERICAL RATING	RATING DESCRIPTION
Excellent	90-100	Performance is excellent in all significant aspects. There are no areas of less than above average performance. Contractor initiative is evident by quality and efficiency of work performed. Areas in need of improvement are few and are minor.

Very Good	**81-90**	**Performance is very effective, efficient and fully responsive to contract requirements. A few deficiencies with little or no adverse effect on overall performance; only minor deficiencies.**
Above Average	**71-80**	**Performance is effective and fully responsive to contract requirements. Few reportable deficiencies with little or no adverse effect on overall performance.**
Satisfactory	**61-70**	**Performance is equivalent to that expected of an average contractor. There are significant areas where performance is below average, but they are partially offset by areas of above average performance. Deficiencies exist with few or no offsetting areas of average or above average performance.**
Poor/Unsat	**Below 61**	**Performance does not meet acceptable standards in one or more areas. Remedial action is required in one or more areas; deficiencies exist in one or more areas which adversely affect overall performance.**

6. FEE FACTOR COMPUTATION: Each function has been assigned a weight based on either level of effort required by the contractor or relative importance of the activity to the Government or a combination of both. This weight represents the percentages of total award fee available to each separate evaluation period and will be used for computing fee recommendations.

7. FUNCTIONS TO EVALUATED: The functions to be evaluated are:

(List the functions covered by the contract).

8. EVALUATION PROCEDURE:

8.1 The basis for the performance evaluations will be the on-going monitoring accomplished by the ACO and COR staffs.

8.2 The ACO will perform a monthly evaluation report of Business Management. The COR's will prepare monthly evaluation reports for Performance of Work, Technical Management and Quality Control.

8.3 The CORs will submit their recommendations and evaluations supported by scores and a brief narrative describing significant findings to the ACO. Submissions shall be completed by the 5th working day of each month.

8.4 The ACO will analyze the COR's input, obtain any required additional information or clarification, and develop the fee recommendation to be given to the AFEB.

9. CONTRACTOR PARTICIPATION: The ACO may furnish the contractor a summary report for the evaluation period, based upon major criteria. The contractor may be allowed to present any data or information on its behalf prior to a determination of award fee. A meeting for a presentatioon by the contractor's top management personnel will be arranged by the ACO. The objective of the meeting is two-fold: to give the contractor the opportunity to describe and support the nature of its performance during the evaluation period, and to acknowledge meritorious work as well as to identify performance areas requiring correction or improvement. It shall not be the objective of the meeting "to negotiate" the amount of award fee. The contractor's comments and the minutes of the meeting may be attached to the Recommended Award Fee Report.

10. CONVERSION OF SCORES TO AWARD FEE: The chart at Exhibit 1 will be used for conversion of raw scores to recommended award fee. As with the weights of the performance elements and evaluations factors, significant findings involving contractor performance can override this conversion chart.

11. AFEB RECOMMENDATIONS: The ACO will prepare a report to the AFEB members for each evaluation period. The report will include the COR's input, contractor's comments, and any additional documentation to support the fee recommendation. The ACO will schedule an AFEB meeting during the month following the evaluation period. The ACO report will be distributed by the ACO three days prior to the AFEB meeting. Members of the COR's staff will be available during the AFEB meeting to provide individual briefings or additional data to the Board members on any area requiring clarification. The Board will approve, modify, or disapprove recommendations as appropriate. The Board's decision will be reduced to writing and attached to the

Award Fee Recommendation (AFR) Report. The AFR report will be retained by the ACO as part of the contract files.

12. AWARD FEE DETERMINING OFFICIAL (AFDO) DETERMINATION.

12.1 The ACO will compile the AFR consisting of the AFEB's recommended award fee for the period and, as attachments, the ACO's recommendation, the monthly COR reports, and the contractor's comments, if any. The report will be staffed with members of the AFEB. The completed report will be submitted to the AFDO for his approval, modification, or disapproval.

12.2 The AFDO will determine the award fee amount based on the AFEB report and his own perception of the contractor's performance. The approved Quarterly Fee Determination signed by the AFDO will be forwarded to the ACO.

1.2.3 The ACO will prepare a unilateral change order to the contract and furnish it to the contractor and appropriate Government offices. The approved Quarterly Fee Determination is retained by the ACO as part of the official contract file.

12.4 Payment of the award fee will be made upon submission of an invoice by the contractor.

13. CHANGES TO THE AWARD FEE PLAN AND PROCEDURES:

13.1 Personnel involved in the administration of the award fee provisions of the contract are encouraged to recommend changes in plan coverage with a view toward changing management emphasis, motivating higher performance levels, or improving the award fee determination process. Recommended changes will be submitted to the ACO for consideration and drafting.

13.2 The AFEB will review recommended ACO changes and provide input to the AFDO as to their recommendations. The AFDO will approve all changes to the plan prior to implementation.

14. CONTROL OF DOCUMENTS: The contents of the plan, inputs from the CORs and technical monitors, reports to the AFEB and AFDO, and documentation supporting the award fee determination are procurement sensitive and shall not be released outside of government channels. The ACO will maintain only the minimum number of copies of all award fee documents and reports prepared in accordance with this plan. All working papers of the COR's, AFEB members and AFDO shall be destroyed or given to the ACO for safekeeping.

Exhibit 1

AWARD FEE CONVERSION CHART

PERFORMANCE SCORE	% OF AVAILABLE AWARD FEE	PERFORMANCE SCORE	% OF AVAILABLE AWARD FEE
100	100.0	75	17.0
99	97.0	74	13.0
98	94.0	73	10.0
97	91.0	72	7.0
96	88.0	71	3.0
95	85.0	70	0.0
94	82.0		
93	79.0		
92	76.0		
91	73.0		
90	70.0		
89	63.0		
88	60.0		
87	57.0		
86	53.0		
85	50.0		
84	47.0		
83	43.0		
82	40.0		
81	37.0		
80	33.0		
79	30.0		
78	27.0		
77	23.0		
76	20.0		

Attachment 1

AWARD-FEE ORGANIZATION

(List AFDO and members of AFEB. Show title, functional activity and role in Award Fee process.)

Attachment 2

AWARD-FEE ALLOCATION BY EVALUATION PERIODS

(Show amount of award fee available for each evaluation period)

APPENDIX A

SAMPLE 2

FIXED PRICE AWARD FEE PLAN

(AFP)

FOR

(Contract Description)

Version 3.3
3 February, 1999

AWARD FEE PLAN APPROVAL SHEET

The attached Award Fee Plan for the LT Solicitation is hereby approved.

_____ _____

Award Fee Determining Official **Date**

COORDINATION PAGE

The attached Award Fee Plan for the XXXX Solicitation has been reviewed and approval is recommended.

DIRECTORATE	SIGNATURE DATE
Chief, XXXXXX Division	_____
Chief, XXXXXXX Division	_____
Contracting Officer	_____

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Attachments

1.0 INTRODUCTION

This AFP is the basis for program evaluation of the contractor's performance of _____(contract description_____ which will be presented to the Award Fee Determining Official (AFDO). The specific criteria and procedures used to assess the contractor's performance and to determine the amount of award fee earned are described herein.

The award fee is in addition to the Fixed Price provisions of the contract. The award fee earned and payable will be determined by the AFDO based upon review of the contractor's performance against the criteria set forth in this plan. The AFP may be unilaterally changed by the AFDO, except for conditions that otherwise require mutual agreement under the contract, 30 days prior to the start of the affected evaluation period. Changes to the AFP that are applicable to a current evaluation period will be incorporated bilaterally. All changes to the AFP will be through contract modification issued by the contracting officer.

2.0 ORGANIZATIONAL STRUCTURE

The following organizational structure and responsibilities are established for administering the award fee provisions of the contract. The AFDO, Award Fee Evaluation Board (AFEB) members, and performance monitors are listed in Attachment 1.

a. Award Fee Determining Official. The AFDO reviews the recommendation(s) of the AFEB, considers all pertinent data, and either approves the recommended earned award fee or recalculates the earned award fee based on the AFDO's findings. The AFDO is the approval authority for changes to the AFP.

b. Award Fee Evaluation Board (AFEB). The AFEB consists of: the Chairperson; the ACO; the Facilitator; the Recorder; and other functional area participants. AFEB members: review performance monitors' evaluations of the contractor's performance considering all information from pertinent sources; prepare and consolidate end of period performance reports; and calculate the earned award fee for recommendation to the AFDO.

(1) AFEB Chairperson. In addition to chairing AFEB meetings and being a participatory member of the AFEB, the AFEB Chairperson is responsible for: recommending appointment of non-voting members to assist the AFEB in performing its functions; and approval of the AFEB reports for submission to the AFDO.

(2) Administrative Contracting Officer. The ACO is a non-voting member

of the AFEB and functions as the liaison between contractor and Government personnel. The ACO will issue contract modifications as necessary to support the award fee process and will notify the contractor of the initial and final performance findings.

(3) AFEB Facilitator. In addition to being a participatory member of the AFEB, the AFEB Facilitator is responsible for: total coordination of the Award Fee process; preparation of performance reports and Award Fee recommendations for approval by the AFEB Chairperson; presentation of approved AFEB reports and recommendations to the AFDO; and training of the performance monitors. As necessary, the AFEB Facilitator will solicit, compile and analyze data relating to trends in contractor performance and identify problem areas.

(4) AFEB Recorder. The AFEB recorder is a non-voting member and is responsible for coordinating the administrative actions necessary to implement the AFP.

c. Performance Monitors. Performance Monitors: maintain written records of the contractor's performance in their assigned evaluation area(s) so that a fair and accurate evaluation is obtained; prepare end of period evaluation reports as directed by the AFEB, and recommend appropriate changes to the AFP.

3.0 AWARD FEE PROCESS

a. Evaluation Periods. The evaluation period is the period of time during which the contractor's performance of the contract requirements is being evaluated. The evaluation periods are shown in Attachment 2.

b. Available Award Fee Amount. The amount of available award fee is equal to 10% of the Fixed Price efforts performed during the evaluation period. The earned award fee is the amount of fee awarded to the contractor based on its performance of those Fixed Price efforts and is allocated as a percentage of the available award fee, ranging from 0% to 100%. Under no circumstances will the contractor be able to recoup (earn later) any portion of an award fee which was available in a previous evaluation period.

c. Performance Evaluation Factors. The contractor will be evaluated based on its collective performance as it relates to specific areas of contract requirements. The contractor's performance towards meeting these requirements shall be the paramount consideration in determining the earned award fee. The major functional areas on which this AFP is based and their relative (weighted) importance for purposes of measuring the contractor's performance are shown in Attachment 3. Examples of how weighted scores are calculated are also shown in Attachment 3. In order for the contractor to qualify for an award fee, a minimum rating of Satisfactory must be attained across all contract performance areas,

SOW paragraph 3.16.2.

d. Performance Evaluation Criteria. Attachment 4 to this plan utilizes adjectival ratings as well as a numerical scoring system of 0-100 points which will be used in conjunction with one another to evaluate performance of each functional area for earned award fee determination. Earned award fee is calculated by applying the total numerical score to the available award fee amount.

e. Contractor Performance Rating. Each performance monitor will evaluate the contractor's performance against the standards contained in SOW paragraph 3.16.2 and Attachment 4 of this plan. Each rating must be accompanied by sufficient justification for the AFEB to validate the rating. The performance rating will be mailed directly to the AFEB Facilitator for consolidation and will be included in the end of period evaluation reports per Attachment 5.

f. End of Period Evaluations. The AFEB Recorder issues end of period evaluation notices to each Performance Monitor 30 calendar days before the end of the evaluation period. Performance Monitors submit their Contractor Performance Rating reports (Attachment 5) to the AFEB Facilitator 7 calendar days after the end of the evaluation period. The AFEB Facilitator compiles all evaluation reports and the optional contractor's self assessment and prepares the briefing for the AFEB. The AFEB convenes 14 calendar days after the end of the evaluation period to evaluate all data for recommendation of earned award fee. Should a single Contractor Performance Rating be less than Satisfactory, the AFEB will immediately validate the sub-standard report. The contractor shall have the opportunity to comment on such a report. The AFEB must render a conclusion on whether the report is substantiated prior to proceeding on with the AF determination. Should the sub-standard report be substantiated, the AFEB may determine that the contractor is not entitled to any award fee for that evaluation period. The AFDO will notify the ACO of the initial determination within 7 calendar days after receipt of the AFEB evaluation report and briefing. The ACO will notify the contractor of the end of period evaluation results and earned award fee amount. The contractor may submit a reclama within 7 calendar days after notification of the end of period evaluation results. The AFDO considers the reclama and forwards the final determination to the ACO within 7 calendar days after receipt of reclama.

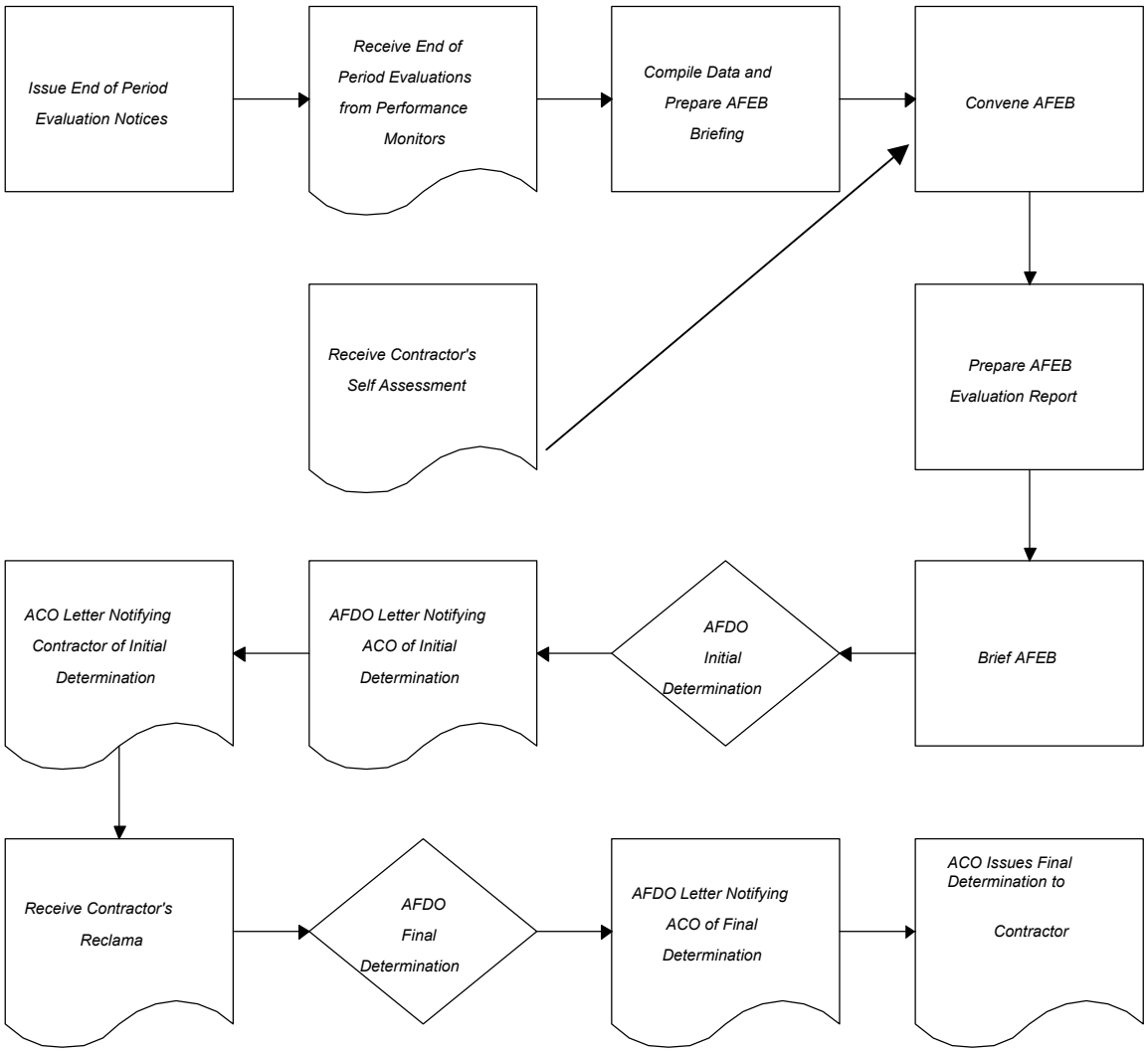


Figure 2: End of Period Performance Evaluation Process

g. <u>Contractor Self Assessment</u>. The contractor may submit a written self evaluation to the ACO within 7 calendar days after the end of the evaluation period. This assessment should contain any information that may reasonably be expected to assist the AFEB in evaluating the contractor's performance. The contractor's self assessment may not exceed ten (10) single sided pages.

h. <u>Reclama</u>. The contractor may submit, for consideration, a written reclama regarding the end of period evaluation results and earned Award Fee Amount Determination. This opportunity is provided as a means to allow the contractor to clarify and/or justify any extenuating circumstances which might assist the AFDO to more clearly understand issues which might have affected the AFDO's initial determination. The contractor will only be afforded this opportunity for the initial determination. The reclama shall be submitted within 7 calendar days after notification of the end of period evaluation results.

4.0 AFP CHANGE PROCEDURE

The ACO will notify the contractor of any approved change(s) by issuing a modification to the contract. Unilateral changes may be made to the AFP before the start of the upcoming evaluation period. Changes affecting the current evaluation period will be bilateral.

5.0 CONTRACT TERMINATION

If the contract is terminated for the convenience of the Government after the start of an award fee evaluation period, the award fee deemed earned for that period shall be determined by the AFDO using the normal award fee evaluation process as identified in Section 3.0, above. After termination for convenience, the remaining award fee amounts allocated to all subsequent award fee evaluation periods cannot be earned by the contractor and, therefore, shall not be paid.

ATTACHMENT 1
AWARD FEE ORGANIZATION

Members

Award Fee Determining Official: _____

Award Fee Evaluation Board Chairperson: _____

Performance Evaluation Board Members:

Performance Monitors

XXXX Performance Monitor
XXXX Performance Monitor
XXXX Performance Monitor
XXXX Performance Monitor
XXXX Performance Monitor

Recorder * _____

*** Non-voting member**

ATTACHMENT 2
AWARD FEE EVALUATION PERIODS

The award fee earned by the contractor will be determined at the completion of each evaluation period shown below. The percentage shown corresponding to each period is the maximum available award fee amount that can be earned during that particular period and is equal to 10% of the total of all fixed price efforts performed during that evaluation period.

Evaluation Period	Duration	Maximum Award Fee
1 LOT I (Phase-In)	3 Months	10% of Total FP/Period
2 LOT II	Quarterly	10% of Total FP/Period
3 LOT III	Quarterly	10% of Total FP/Period
4 LOT IV	Quarterly	10% of Total FP/Period
5 LOT V	Quarterly	10% of Total FP/Period
6 LOT VI	Quarterly	10% of Total FP/Period
LOT VII (Transition)	3 Months	10% of Total FP/Period

ATTACHMENT 3
PERFORMANCE EVALUATION FACTORS

The following are performance factors/subfactors which will be evaluated for calculation of earned award fee. Each factor has a weight assigned which when multiplied by the points awarded for the associated evaluation criteria, becomes the weighted score for that factor. The sum of the weighted scores is then multiplied against the available award fee to arrive at the earned award fee which will be presented to the AFDO and PCO for approval. For those factors having subfactors, the assigned weight is the sum of its subfactors.

Evaluation Period 1:

Factor/Subfactor	Weight
Phase-In Activities	30%
AIS Development	40%
Program Management	30%

Evaluation Periods 2 - 6:

Factor/Subfactor	Weight
Meeting Training Mission Need	75%
Site 1 or Criteria 1	25%
Site 2 or Criteria 2	12%
Site 3 or Criteria 3	12%
Site 4 or Criteria 4	6%
Site 5 or Criteria 5	20%
Lifecycle Sustainment	20%
Configuration Management & Data	5%

Evaluation Period 7 (if required):

Factor/Subfactor	Weight
Phase-Out Activities	75%
Transition	25%

NOTE: The percentage weights assigned to the factors/subfactors above are quantifying devices only. Their sole purpose is to provide guidance in arriving at a general assessment of the amount of award fee earned. In no way do they imply an arithmetical precision to any judgmental determination of the contractor's overall performance and amount of award fee earned.

Subfactor Calculation Example:

The following are examples of how both factor and subfactor weighted scores are calculated and how these scores might be used to arrive at an earned award fee value:

Subfactor	Rating		Subfactor Weight		Factor Weight		Weighted Score *
xxxx	78	x	25%	/	75%	=	26.0
xxxx	84	x	12%	/	75%	=	13.4
xxxx	75	X	12%	/	75%	=	12.0
xxxx	90	X	6%	/	75%	=	7.2
xxxx	87	X	20%	/	75%	=	23.2
	Total for Factor						81.8

*** Subfactor weighted scores are calculated as follows: [Rating x Subfactor Weight] / Factor Weight = Weighted Score**

Factor Calculation Example:

Factor	Rating				Weighted Weight	Score
Training Msn.	81.8	x	75%	=	61.4	
LCS	80.0	x	20%	=	16.0	
Config & AIS Data	92.1	x	5%	=	4.6	
	Total		100%		82.0%	

If, in this example the available award fee is $1,000,000 the earned award fee for the evaluation period would be derived as follows:

Evaluation Period Available Award Fee	$1,000,000
Total Weighted Score	x 82.0%
EARNED AWARD FEE	$ 820,000

ATTACHMENT 4
PERFORMANCE EVALUATION CRITERIA

(NOTE: No award fee will be paid for performance at or below the satisfactory level)

Evaluation Period 1:

Phase-In Activities

EXCELLENT (Point Range 76-100)

Contractor has completed joint inventories of the support equipment, spares, tools and test equipment and documentation by the 80th day of the Phase-In period. Contractor has all site personnel hired, trained, and operational by the 80th day of the Phase-In period. Contractor shows consistent progress and solves any problems without government intervention.

VERY GOOD (Point Range 26-75)

Contractor has completed joint inventories of the support equipment, spares, tools and test equipment and documentation by the 85th day of the Phase-In period. Contractor has all site personnel hired, trained, and operational by the 85th day of the Phase-In period. Contractor shows consistent progress and problems are communicated to Government personnel with recommended solutions. Recommended solutions require no government intervention.

GOOD (Point Range 1-25)

Contractor has completed joint inventories of the support equipment, spares, tools and test equipment and documentation by the 90th day of the Phase-In period. Contractor has all site personnel hired, trained, and operational by the 90th day of the Phase-In period. Contractor shows progress and problems are communicated to Government personnel with recommended solutions which require some government intervention.

SATISFACTORY

Contractor meets contract requirements of SOW paragraph 3.14.1.

(Mission 1)

EXCELLENT (Point Range 76-100)

Contractor is fully functional by the 80th day of the Phase-In period. Contractor's has no deficiencies remaining unresolved by the of the 80th day of the Phase-In period. Contractor has provided AIS training for Government personnel by the 80th day of the Phase-In period.

VERY GOOD (Point Range 26-75)

Contractor's is fully functional by the 85th day of the Phase-In period. Contractor has few, if any, minor unresolved deficiencies and no major deficiencies noted by the 85th day of the Phase-In period and with no deficiencies remaining unresolved at the end of the Phase-In period. (Minor deficiencies can be resolved in one day or less.) Contractor has provided AIS training for Government personnel by the 85th day of the Phase-In period.

GOOD (Point Range 1-25)

Contractor's is fully functional by the 90th day of the Phase-In period. Contractor has no major system deficiencies or no more than 10 minor unresolved system deficiencies noted by the 90th day of the Phase-In period and with no deficiencies remaining unresolved at the end of the Phase-In period. (Major deficiencies will be resolved in three days or less. Minor deficiencies will be resolved in one day or less.) Contractor has provided AIS training for Government personnel by the 90th day of the Phase-In period.

SATISFACTORY

Contractor meets contract requirements of SOW paragraph 3.10 & 3.14.1.

Program Management

EXCELLENT (Point Range 76-100)

Contractor is committed to accomplishing all Phase-In tasks by the 80th day of the Phase-In period. All proposed critical Program Management positions have been filled with qualified personnel by the 30th day of the Phase-In period. Contractor identifies and communicates potential problem areas and issues and executes plans to solve those problems with no Government intervention.

VERY GOOD (Point Range 26-75)

Contractor is committed to accomplishing all Phase-In tasks by the 85th day of the Phase-In period. All proposed critical Program Management positions have been filled with qualified personnel by the 60th day of the Phase-In period. Contractor identifies potential problem areas and issues and has proposed approaches to solve those problems with minimal Government intervention.

GOOD (Point Range 1-25)

Contractor is committed to accomplishing all Phase-In tasks by the 90th day of the Phase-In period. All proposed critical Program Management positions have been filled with qualified personnel by the 90th day of the Phase-In period. Contractor is active in identifying potential problem areas and solutions.

SATISFACTORY

Contractor meets contract requirements of SOW paragraph 3.0.2 & 3.14.1.

Evaluation Periods 2 - 6:

Training Mission Need

EXCELLENT (Point Range 76-100)

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2. Contractor consistently makes major contributions to the achievement of the training mission(s) through initiative, proactive action, and/or cooperation.

VERY GOOD (Point Range 26-75)

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2. Contractor makes major contributions to the achievement of the training mission(s) through initiative, proactive action, and/or cooperation.

GOOD (Point Range 1-25)

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2. Contractor makes minor contributions to the achievement of the training mission(s) through initiative, proactive action, and/or cooperation.

SATISFACTORY

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2 for CTC, AWSS and TES.

Life-Cycle Sustainment

EXCELLENT (Point Range 76-100)

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2. Consistently provides requisite information, participation, and viable alternatives/solutions that result in major benefits to the Government.

VERY GOOD (Point Range 26-75)

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2. Provides requisite information, participation, and viable alternatives/solutions that result in major benefits to the Government.

GOOD (Point Range 1-25)

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2. Provides requisite information, participation, and viable alternatives/solutions that result in minor benefits to the Government.

SATISFACTORY

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2.

<u>Configuration Management & AIS Data</u>

EXCELLENT (Point Range 76-100)

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2. Consistently provides logistics data support (configuration management, data currency, and AIS support) that result in major benefit to the Government.

VERY GOOD (Point Range 26-75)

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2. Provides logistics data support (configuration management, data currency, and AIS support) that result in major benefit to the Government.

GOOD (Point Range 1-25)

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2. Provides logistics data support (configuration management, data currency, and AIS support) that result in minor benefit to the Government.

SATISFACTORY

Contractor meets contract requirements and performs to the standards within SOW paragraph 3.16.2.

Evaluation Period 7:

Phase-Out Activities

EXCELLENT (Point Range 76-100)

Contractor meets all Phase-out tasks by the 90th day of the Phase-Out period. Contractor maintains all equipment to meet contract availability requirements throughout the Phase-Out period. Contractor proactively provides assistance to contractor and Government personnel to effect a seamless transition. All GFE is operational and all accountable inventory is in place by the 80th day of the Phase-Out period. Contractor coordinates with local Government activities, to ensure that there are no Government property/data accountability issues remaining by the 80th day of the Phase-Out period.

VERY GOOD (Point Range 26-75)

Contractor meets all Phase-out tasks by the 90th day of the Phase-Out period. Contractor maintains all equipment to meet contract availability requirements throughout the Phase-Out period. Contractor proactively provides assistance to contractor and Government personnel to effect a seamless transition. All GFE is operational and all accountable inventory is in place by the 85th day of the Phase-Out period. Contractor coordinates with local Government activities, to ensure that there are no Government property/data accountability issues remaining by the 85th day the Phase-Out period.

GOOD (Point Range 1-25)

Contractor meets all Phase-out tasks by the 90th day of the Phase-Out period. Contractor maintains all equipment to meet all contract availability requirements throughout the Phase-Out period. Contractor proactively provides assistance to contractor and Government personnel to effect a seamless transition. All GFE is operational and all accountable inventory is in place by the 90th day of the Phase-Out period. Contractor coordinates with local activities, to ensure that there are no Government property/data accountability issues remaining by the 90th day of the Phase-Out period.

SATISFACTORY

Contractor meets contract requirements of SOW paragraph 3.14.2.

AIS Transition

EXCELLENT (Point Range 76-100)

Contractor's AIS data is fully transferable and useable by the 80th day of the Phase-Out period. Contractor has no deficiencies remaining unresolved by the the 80th day of the Phase-Out period.

VERY GOOD (Point Range 26-75)

Contractor's AIS data is fully transferable and useable by the 85th day of the Phase-Out period. Contractor has few, if any, minor unresolved deficiencies and no major deficiencies noted by the 85th day of the Phase-Out period and with no deficiencies remaining unresolved by the end of the Phase-Out period. (Minor deficiencies can be resolved in one day or less.)

GOOD (Point Range 1-25)

Contractor's AIS data is fully transferable and useable by the 90th day of the Phase-Out period. Contractor has no major data deficiencies or no more than 10 minor unresolved data deficiencies noted by the 90th day of the Phase-Out period and with no deficiencies remaining unresolved by the end of the Phase-Out period. (Major deficiencies will be resolved in three days or less. Minor deficiencies will be resolved in one day or less.)

SATISFACTORY

Contractor meets contract requirements of SOW paragraph 3.10 & 3.14.2.

ATTACHMENT 5
PERFORMANCE EVALUATION REPORT FORMAT

To be completed prior to contract award.

APPENDIX B

SAMPLE FORMAT FOR THE

AWARD REVIEW BOARD'S AWARD FEE FINDINGS & RECOMMENDATIONS

The award review board for _(installation)_ _(type of services) CPAF contract number _____ has completed its evaluation of the contractor's performance for the period _____. The evaluation of contractor performance was made against the criteria of:

Performance of work, technical management, business management and quality control. The contract provides for an award fee of $_____. Of this amount, $_____ is available for award during the current evaluation period. Based upon review and analysis of all the data, the award review board finds that the contractor's overall performance merits

A rating of _____ percent which equates to an award fee in the amount of _____. The following significant findings of contractor's strengths and weaknesses are in support of the recommended award

Fee:

Performance of Work-

Technical Management-

Business Management-

Quality Control-

_____

CHAIRMAN AFEB

APPENDIX B

SAMPLE FORMAT
AWARD FEE DETERMINING OFFICIAL'S DECISION AND REPORT TO THE CONTRACTING OFFICER AND CONTRACTOR

(Enter the following information in body of official letter)

Subject: Award Fee Determination, Contract XXXXXX

Based upon the findings of the award fee evaluation board for subject contract, I hereby determine that a fee of $_____ out of the available fee pool of $_____is awarded to ___(contractor name)___ for the contract period _____ through _____.

OFFICIAL NAME
TITLE
Award Fee Determining Official

APPENDIX C

DEVELOPING SCALES FOR CONVERTING PERFORMANCE POINTS TO PERCENTAGE OF AWARD FEE

C-1. Assessing the Incentive

a. The first step in developing a performance score - award fee conversion scale is to determine the incentive structure one wishes to invoke in the contract. One's philosophy of doing business with contractors will determine this. Some contracting officers may feel that each additional performance point should be worth the same percentage of the available award fee pool. This is what we call a proportional or linear scale. Others may feel that lower level performance should be disincentivized by making the lower half of the range yield smaller proportions of the fee and the upper half of the range yield larger proportions. This would produce some type of non-linear (non-proportional) scale.

b. Two overarching principles must be kept in mind, however, when designing any award fee conversion scales.

1. One consequence of the economic Law of Diminishing Returns is that for a contractor's performance to come closer and closer to perfection requires a disproportionate expenditure of resources. When performance is mediocre, there are a number of low cost improvements available. But as performance level rises, the available improvements become more and more expensive to implement. Therefore, incentives in service contracts must aim for excellence but not perfection. Scores in the upper 80's to low 90's is a more realistic and cost-effective goal.

2. Inasmuch as improvements become more difficult to achieve, and more expensive, as performance climbs into the excellent range, a non-linear scale that "packs" disproportionately more fee into the upper half of the scale rewards the contractor for the greater effort and management necessary. It is perhaps the better "carrot" from an economic standpoint, a better match of incentive to level of effort. However, based on the Law of Diminishing Returns the *proportion* of fee should decrease in the 92 - 100% performance range compared to that in the 80 - 92% range.

c. There are several types of non-linear scale that could be considered:

1. Power: The familiar power curve, which resembles a fishhook shape, yields very small proportions of the fee in the lowest range of scores, but quickly "accelerates" (increases at an increasing rate), giving much greater proportions of the fee in the upper range of points. This sort of scale has several problems: (1) it is exceedingly difficult to specify properly, and (2) it defies the law of

diminishing returns in that it may cause an ambitious contractor to put forth so much effort to reach 100 points that the incremental benefits received by the government are not worth the additional incurred costs. Additionally, it does not provide as much incentive as does the linear scale, so that the contractor may actually be disincentivized depending on the shape of the curve.

2. Quadratic: The quadratic curve resembles the shape of the exponential curve except that its slope changes more slowly. This incentive structure differs slightly from the exponential, but they share the problems discussed above.

3. Cubic: The cubic, or third order, curve has the S-shape shown in figure C-1. This curve, unlike the other two, tails off as it approaches 100 points. This scale is more appropriate to recognition of the law of diminishing returns and proper incentivization. Although it gives more fee than the other scales in the lower range, it also provides more incentive in the upper range.

c. Figure C-1 below shows the general shape of these three types of non-linear scales and compares them to the linear scale. In the next section we show how to go about developing specifying equations to generate these types of scales.

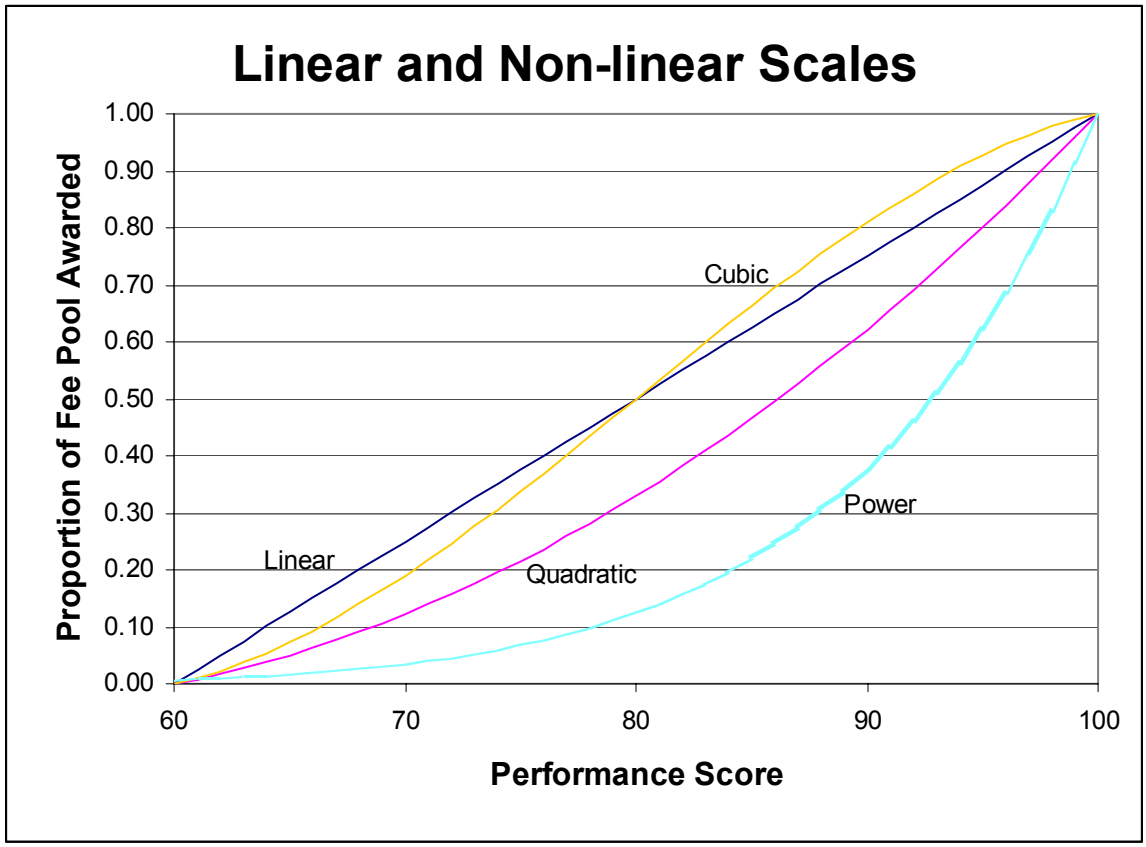


FIGURE C-1

C-2. Specifying Equations.

a. To generate scales we first need to generate equations that relate performance points to proportionate amounts of award fee. This takes some knowledge of algebra and access to a spreadsheet program that will perform matrix algebra.

b. We first must know the general form of the equation for the type of scale we wish to generate. The four types of scale discussed above have the following general types of equation:

Linear	$Y = A + BX$, **B positive.**
Power	$Y = AX^b$, **b positive**
Parabolic	$Y = AX^2 + BX + C$
Cubic	$Y = AX^3 + BX^2 + CX + D$

c. Knowing the general form, we know how many parameters we have in the equation. This is the key to generating the scale.

1. The linear and power equations have two coefficients (A and B), the parabolic has three (A, B, C) and the cubic has four (A, B, C, D). To develop specifying equations for these coefficients (that is, replace the letters with appropriate coefficients) we must be able to write *an equation for each coefficient* we must find.

2. Each equation we write must specify an X (in our case a value for a performance score) and a Y (here an appropriate proportion of available award fee). We insert these values for X and Y into general forms of the equation and then determine the coefficients using methods for solving simultaneous equations.

3. Many spreadsheet programs now incorporate capabilities of solving simultaneous equations quickly and easily, and some modern calculators will also do the job. The examples given below use the ability of Microsoft Excel to solve matrix algebra as the method for determining the coefficients. Below we give examples of each.

d. Example 1: Linear scale. A linear equation specifies a slope value (B) and a y-axis intercept value (A), therefore we must specify and solve two simultaneous equations of the linear form. To do this, all we need to do is specify the range of performance points we will use. If our range is 60 to 100, then the two X-values are 60 and 100. Our proportion of fee will go from 0 (at 60

points) to 1.0 (at 100 points); these are the Y-values. Our two equations are therefore as follows:

$$\underline{Y = A + BX}$$
$$1 = A + 100B$$
$$0 = A + 60B$$

1. Solving these two simultaneous equations requires only that we subtract the second equation from the first and divide by the coefficient of B. We then plug the B value into either of the simultaneous equations to solve for A. This is shown below.

$$40B = 1$$
$$B = 0.025$$
$$A = 0 - 60B$$
$$A = -1.5$$

giving a specifying equation of Y = -1.5 + 0.025X, where X is performance points earned.

2. What this essentially says is that the contractor gets 0% at 60 points, and gets 2.5% of available award fee for every additional performance point. The reader can verify that at 80 points (midpoint of the range) the contractor gets 50%, at 90 points (3/4 of the range) it gets 75% and at 100 points, 100%.

e. Example 2: Quadratic scale. A quadratic equation specifies three coefficients: one for X^2 (A), one for X (B), and a constant, C, which is really the parameter for X^0, or 1. We must have three equations of the general form to solve for these three coefficients.

1. We therefore specify three values of X (performance points) and three values of Y (proportion of award fee). These values reflect critical points in directing the shape of the curve, hence the total distribution of fee relative to performance.

2. Since the performance values are constrained to a minimum and a maximum these should be two of the points specified, with 0% award fee at the minimum and 100% at the maximum. The other point can be anywhere between, but should be picked to reflect a critical minimum performance point, with the percentage fee the contracting officer (CO) believes appropriate. For example, in a range from 60 to 100 the midpoint is 80. If the CO wishes most of the fee to be earned above this midpoint, attach a fee percentage below 50% to this performance point. The equation generated will smoothly proportion all other points in the range so that more than 50% of fee is earned above 80.

3. Below is an example of the development of a quadratic scale for a performance range from 60 to 100, with 0% fee at 60, 100% at 100, and 33% at 80. We generate 3 equations in X and Y, with X the selected performance points and Y the attached fee percentages. Just "plug" the X's and Y's into the formula as

follows:

$$\underline{Y = AX^2 + BX + C}$$
$$0 = A*(60)^2 + B*(60) + C*1$$
$$0.33 = A*(80)^2 + B*(80) + C*1$$
$$1.0 = A*(100)^2 + B*(100) + C*1$$

(a) Now that we have three equations in three unknowns we solve for the unknowns (A, B, and C) using matrix algebra. The following is the result of the /Data Matrix commands in Excel. The Excel on-line help shows how to use the MINVERSE and MMULT functions that together solve the simultaneous equations for parameter values (A, B, C, and D). We perform the MINVERSE function on the above values set in an array as shown on the following page. Use MINVERSE only on the X values, not the Y-values (column D below).

	A	B	C	D
1	3600	60	1	0
2	6400	80	1	0.33
3	10000	100	1	1

=MINVERSE(A1:C3)

The spreadsheet will display the set of inverse values shown in the table below. Then apply the MMULT function to these values and the Y-values in column D above. Again, see Excel on-line help for the MMULT function for help on using this function.

	A	B	C
5	0.00125	-0.0025	0.00125
6	-0.225	0.4	-0.175
7	10	-15	6

=MMULT(A5:C7,D1:D3)

The two operations result in these parameters:

0.000425	**Parameter A**
-0.043	**Parameter B**
1.05	**Parameter C**

which produce this specifying equation by "plugging" the parameters into the general equation:

$$Y = 0.000425X^2 - 0.043X + 1.05$$

(b) The above equation yields the following proportions of fee for each performance point in the specified domain:

Table C-1

Quadratic Performance-Fee Conversion Scale

PERF SCORE	PROP OF FEE	PERF SCORE	PROP OF FEE	PERF SCORE	PROP OF FEE	PERF SCORE	PROP OF FEE
60	0.0000	71	0.1394	81	0.3554	91	0.6564
61	0.0084	72	0.1572	82	0.3817	92	0.6912
62	0.0177	73	0.1758	83	0.4088	93	0.7268
63	0.0278	74	0.1953	84	0.4368	94	0.7633
64	0.0388	75	0.2156	85	0.4656	95	0.8006
65	0.0506	76	0.2368	86	0.4953	96	0.8388
66	0.0633	77	0.2588	87	0.5258	97	0.8778
67	0.0768	78	0.2817	88	0.5572	98	0.9177
68	0.0912	79	0.3054	89	0.5894	99	0.9584
69	0.1064	80	0.3300	90	0.6225	100	1.0000
70	0.1225						

(c) As can be seen, 67% of the available fee requires performance equivalent to 81 points or better. Plotting these points on graph paper will confirm a smooth parabolic shape curve for the interval. The problem with parabolic curves is also clearly visible -- there is a huge jump in percentage of fee earned as we go from 95 to 100 points because parabolic curves increase at an increasing rate. Fully 20% of award fee is in the interval from 95 to 100 points, yet the incremental cost of achieving performance up around 100 points is probably disproportional to any benefits received. This may be alleviated to an extent by specifying greater percentage of fee at the critical point (80). This causes the curve to "accelerate" more slowly.

f. Example 3: Cubic (S-shaped) curve. A cubic equation specifies four coefficients: one for X^3 (A), one for X^2 (B), one for X (C), and the constant (D) for X^0. We must have four equations of the general form to solve for these coefficients.

1. We therefore specify four values of X (performance points) and four values of Y (proportion of award fee), including the minimum and maximum values. These values again reflect critical points in directing the shape of the curve, hence the total distribution of fee relative to performance.

2. Since the performance values are again constrained to a minimum and a maximum, these should be two of the points specified, with 0% award fee at the minimum and 100% at the maximum. The other points can be anywhere between, but again should be picked to reflect critical performance points. These two points are assigned the fee percentages the contracting officer believes appropriate to a proper incentive structure. For example, in a range from 60 to 100, we can specify the points one-third and two-thirds of the way through the range, but there are many other points. Using the procedure below, the resulting equation will smoothly proportion all other points.

3. Below is an example of the development of a cubic scale with a performance range from 60 to 100, 0% fee at 60, 100% at 100, 50% at 80 and 88.5% at 93.

(a) We generate four (4) third-order equations in X and Y, with X again representing the selected performance points and Y the associated fee percentages:

$$\underline{Y = AX^3 + BX^2 + CX + D}$$

$$1 = A*(100)^3 + B*(100)^2 + C*(100) + D*1$$

$$0.885 = A*(93)^3 + B*(93)^2 + C*(93) + D*1$$

$$0.5 = A*(80)^3 + B*(80)^2 + C*(80) + D*1$$

$$0 = A*(60)^3 + B*(60)^2 + C(60) + D*1$$

(b) Now that we have four equations in four unknowns we solve for the unknowns (A, B, C and D) using matrix algebra. The following is again the result of using the matrix operations (MINVERSE, followed by MMULT) in Microsoft Excel. Remember to use MINVERSE only on the X-values, not the Y-values. The spreadsheet will show the inverse values in an array that you choose.

Cubic Specification Equations

	A	B	C	D	E
3	1000000	10000	100	1	1
4	804357	8649	93	1	0.885
5	512000	6400	80	1	0.5
6	216000	3600	60	1	0

=MINVERSE(A3:D6)

	A	B	C	D
10	0.000178	-0.00033	0.000192	-0.00003
11	-0.04160	0.079920	-0.04865	0.010340
12	3.182142	-6.26040	4.015384	-0.93712
13	-79.7142	159.8401	-107.307	28.18181

Next, use the MMULT function on the inverse values and Y-values as shown:

=MMULT(A10:D13,E3:E6)

(c) The procedure generates the following coefficients in Excel:

-0.00001	A
0.004795	B
-0.35062	C
8.090409	D

resulting in this specifying third-order equation:

$$Y = -0.00001X^3 + 0.004795X^2 - 0.35062X + 8.090409$$

4. The above specifying equation generates the conversion table shown in table C-2 shown below, and is S-shaped as shown by figure C-1 above.

Table C-2
Cubic Performance Score-Fee Conversion Table

Score	% Fee	Score	% Fee	Score	% Fee	Score	% Fee
60	0.00	71.00	21.76	81.00	53.30	91.00	83.63
61	1.02	72.00	24.63	82.00	56.58	92.00	86.14
62	2.27	73.00	27.59	83.00	59.84	93.00	88.50
63	3.73	74.00	30.64	84.00	63.07	94.00	90.71
64	5.40	75.00	33.75	85.00	66.25	95.00	92.74
65	7.26	76.00	36.93	86.00	69.36	96.00	94.60
66	9.29	77.00	40.16	87.00	72.41	97.00	96.27
67	11.50	78.00	43.42	88.00	75.37	98.00	97.73
68	13.86	79.00	46.70	89.00	78.24	99.00	98.98
69	16.37	80.00	50.00	90.00	80.99	100.00	100.00
70	19.01						

A study of Table C-2 shows that, while 50% of profit is earned in the range from 60 to 80, scores from 70 to 80 earn more than half of that. Conversely, above 80 points only22% of the fee is earned by scores 90 or above. Thus, the majority of fee is packed into the range from 80 - 92, which accords with the Law of Diminishing Returns. The S-shape can be made more extreme (that is, pack more of the fee in the middle to upper ranges) by changing X and Y in the two *interior* points. However, it will tend to tail off more drastically in the 90-point range.

g. While the other non-linear scales (power, exponential, hyperbolic, and logarithmic) can be specified, they are extremely difficult to use with a constrained range. Therefore, we will not go into their specification here. The three types given are enough to provide a wide range of incentive structures. However, in the next section we will develop a scale based on the well-known normal, or bell-shaped, curve.

C-3. The Normal Curve

a. The normal curve is a statistical curve based on the normal frequency distribution with its characteristic bell shape. Most human physical characteristics, as well as performance of mental tasks, form such a frequency distribution. Therefore it seems logical to measure contractor performance using that distribution.

b. The basic coefficients for generating a normal distribution are the mean

(average) and the standard deviation (STD), a measure of score dispersion around the mean score. Each potential score in the range can then be converted to what is termed a "z-score" which is the numerical score expressed in number of standard deviations (STD) from the mean score.

c. Statisticians have generated a table called "The Area under the Normal Curve" which is based on z-scores. Essentially this table tells us the cumulative area under the bell curve from the mean (z-score of 0) to the z-score of interest.

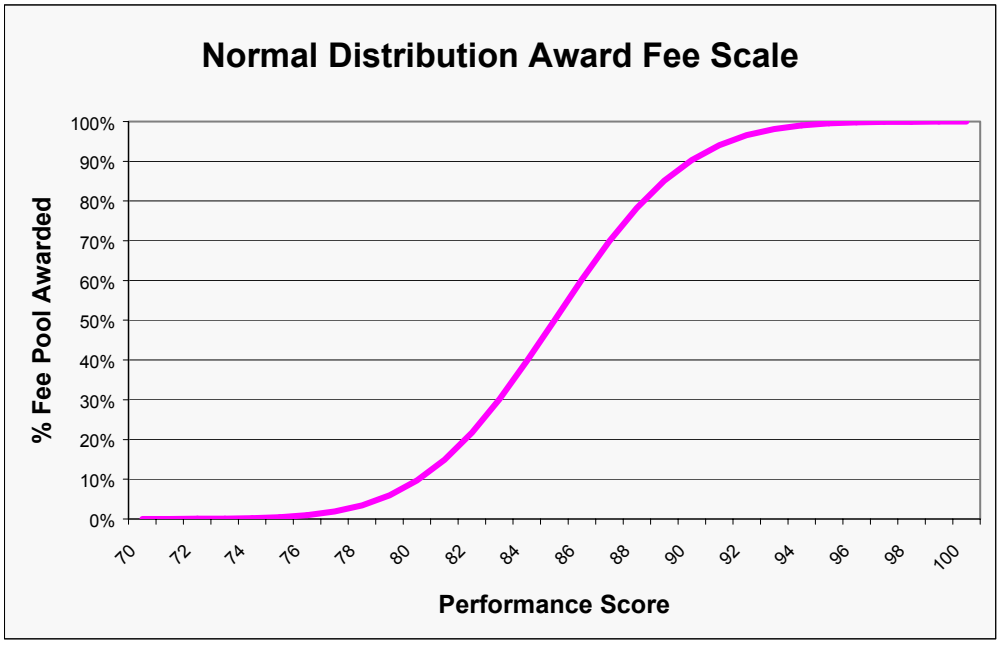
1. What makes this useful is that the area under the total normal curve is equal to 1. Therefore, any portion of the area will be a proportion between 0 and 1.

2. As we have repeatedly showed, we are trying to assign a proportion of total fee (between 0 and 1) to each possible performance score in our range, so assigning areas under the normal curve amounts to the same result.

d. In order to generate a normal scale for our purposes, we must again know the range of points we will consider. Suppose this time we decide that a range from 70 to 100 is appropriate, since in schools this is usually the range for passing grades.

1. The mean or average value of this range is, of course, 85 points. The standard deviation is approximately 8.944 (any business calculator or spreadsheet program will calculate this). Using these figures, we convert each point in the range to a z-score using the following formula: $z = (\text{score} - \text{mean})/\sigma$.

2. If you do the above procedure, you will probably note that the z-scores range from around -1.69 to +1.69. This does not encompass the entire normal curve, which ranges from -3.9 to +3.9 standard deviations. The standard deviation for the performance range must be adjusted so that the top and bottom point scores have z values of 3.9 and -3.9, respectively. Knowing that a score of 100 must be 3.9 STD from the mean of 85, we simply manipulate the z-score formula to solve for STD:



z = (score - mean)/σ (C-1)
σ = (score - mean)/z
= (100 - 85)/3.9
= 3.846

We then use this adjusted STD in the original formula (C-1) for converting the performance score range to equivalent z-scores.

3. When each point score has a corresponding z-score, find the proportion of the normal curve for each z-score from a table of Areas Under The Standard Normal
Curve. Such a table is included at the end of this appendix. The area under the curve Figure C-3

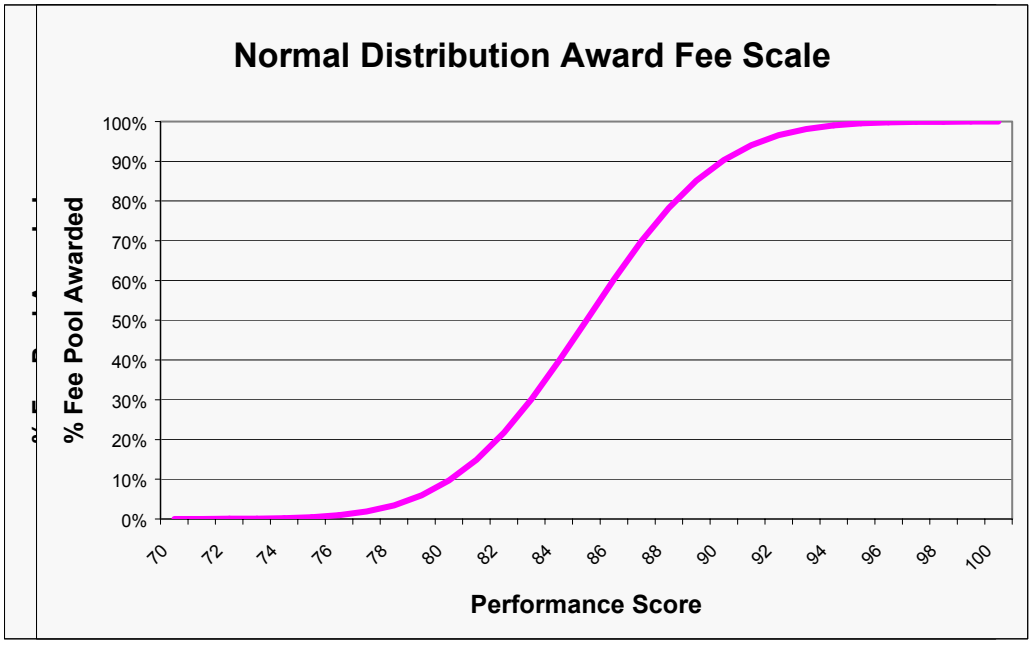
will range from 0 (at z = 0) to 0.5000 (at z = 3.90). Assign the appropriate area to each z-score from the table. Subtract these values from 0.5 for scores below the mean (70 - 84), and add these area values to 0.5 for scores above the mean (86 - 100). Assign 0.5 to the mean value.

4. You now have a series of decimal amounts ranging from 0 to 1.0 corresponding to your chosen performance score range. These amounts are the proportion of fee assigned by the normal distribution. Figure C-3 below shows the cumulative fee curve, which resembles a flattened S, and also shows that the distribution roughly follows the bell shaped normal curve. Table C-3 below gives the corresponding conversion scale.

Table C-3

Normal Distribution Award Fee Scale

Perf Score	Pct Fee	*Perf* Score	Pct Fee
70	0.00%	86	60.26%



71	0.01%	87	69.85%
72	0.04%	88	78.23%
73	0.09%	89	85.08%
74	0.21%	90	90.32%
75	0.47%	91	94.06%
76	0.96%	92	96.56%
77	1.88%	93	98.12%
78	3.44%	94	99.04%
79	5.94%	95	99.53%
80	9.68%	96	99.79%
81	14.92%	97	99.91%
82	21.77%	98	99.96%
83	30.15%	99	99.99%
84	39.74%	100	100.00%
85	50.00%		

e. The observant reader will no doubt notice that the normal distribution tends to skyrocket after the midpoint, "cramming" 49% of the fee pool into the range from 85 to 94, and giving almost no additional fee after 94 points. Two points need to be made about this scale:

1. Although this once again squares with the law of diminishing returns, it may be disconcerting that the contractor can make 85% of his fee by scoring 89 points, and 90% of fee by scoring 90. (On a linear scale, a score of 90 would achieve 75% of fee). The disparity arises because the normal distribution "values" above-average scores much more highly than a linear distribution. Since this is so, it might provide an incentive for a contractor to "target" or accept a lower performance score than under another fee distribution.

2. On the other hand, under a linear distribution a contractor must score 97 to achieve 90% of his fee. Due to the law of diminishing returns, scoring that high will cost the government considerably more than achieving an 87 or 89. It can be argued that, from an overall efficiency standpoint, it is more cost-effective for a contractor to perform in the high 80's than in the high 90's. That high a performance level gives the government the "maximum bang for the buck" since the additional award fee is less than one percent of overall cost, whereas the contractor may expend 5% or more additional cost to achieve the same fee level under a linear distribution.

3. The primary consideration, however, is that this distribution is one of many available, and the contracting officer has a spectrum of distributions to choose from.

C-4. Rationale for the Method

a. The point of this whole exercise should not be lost. It is more than just a matter of devising elegant curves. The government does have a duty, despite the

subjective nature of the award fee process, to conduct all aspects of it in a manner clearly not arbitrary and capricious. The award fee performance scale is an area where we can give at least the appearance of arbitrariness if the scale does not appear to have coherent logic behind it.

b. While the scale should reflect our desire to incentivize certain levels of performance (and perhaps disincentivize anything higher or lower), it also should be based on some unifying principle that enables it to "hang together" logically. One such unifying logic is the logic reflected in the curve generating procedures outlined above. These procedures generate a whole conversion scale that reflects to a significant degree the exact incentive structure the contracting officer wishes to portray to the contractor.

(The next page give the Table of Areas under the Normal Curve for use in developing the Normal Distribution Conversion Scale)

TABLE C-4
TABLE OF AREAS UNDER THE STANDARD NORMAL CURVE

z	0*	1	2	3	4	5	6	7	8	9
0.0	0.0000	0.0040	0.0080	0.0120	0.0160	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0754
0.2	0.0793	0.0832	0.0871	0.0910	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.1480	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.1700	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.1950	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.2190	0.2224
0.6	0.2258	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2518	0.2549
0.7	0.2580	0.2612	0.2642	0.2673	0.2704	0.2734	0.2764	0.2794	0.2823	0.2852
0.8	0.2881	0.2910	0.2939	0.2969	0.2996	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.3340	0.3365	0.3389
1.0	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.3770	0.3790	0.3810	0.3830
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.3980	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.4207	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.4370	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4564	0.4573	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.4750	0.4756	0.4761	0.4767
2.0	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.4830	0.4834	0.4838	0.4842	0.4846	0.4850	0.4854	0.4857
2.2	0.4861	0.4864	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.4890
2.3	0.4893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.4920	0.4922	0.4925	0.4927	0.4929	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.4940	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4957	0.4959	0.4960	0.4961	0.4962	0.4963	0.4964
2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.4970	0.4971	0.4972	0.4973	0.4974
2.8	0.4974	0.4975	0.4976	0.4977	0.4978	0.4979	0.4980	0.4981	0.4982	0.4983
2.9	0.4981	0.4982	0.4982	0.4983	0.4984	0.4984	0.4985	0.4985	0.4986	0.4986
3.0	0.4987	0.4987	0.4987	0.4988	0.4988	0.4989	0.4989	0.4989	0.4990	0.4990
3.1	0.4990	0.4991	0.4991	0.4991	0.4992	0.4992	0.4992	0.4992	0.4993	0.4993
3.2	0.4993	0.4993	0.4994	0.4994	0.4994	0.4994	0.4994	0.4995	0.4995	0.4995
3.3	0.4995	0.4995	0.4995	0.4996	0.4996	0.4996	0.4996	0.4996	0.4996	0.4997
3.4	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4998
3.5	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998
3.6	0.4998	0.4998	0.4998	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999
3.7	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999
3.8	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999
3.9	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000

*** To read the table, note that the columns to the right of the z-score column represent a number in the hundredths decimal place (0.01). For example z=2.96 is in the row marked “2.9” in the column marked "6" with a corresponding area of 0.4985.**